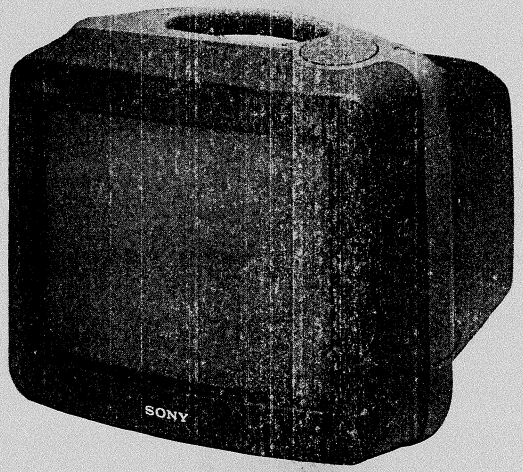
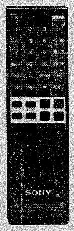
KV-M1120
RM-828

SERVICE MANUAL

AEP Model
Chassis No. SCC-F70A-A





EE-1A CHASSIS

MODELS OF THE SAME SERIES	
KV-M1120	

SPECIFICATIONS

[KV-M1120]

Television system.	B/G/H/I/L
Colour system.	PAL, SECAM, NTSC3.58, NTSC4.43
Channel coverage.	**[B/G/H].** VHF : E2-E12 UHF: E21-E69
	ITA VHF A-H2 (C), UHF 21-69
	CATV (1) : S1-S41
	CATV (2) : S01-S05, M1-M10, U1-U10
	[I]. VHF : A-J, UHF B21-B69
	CATV : S1-S41, S01-S05
	[L]. VHF : F2-F10, UHF: F21-F69
	CATV : S01-S44
Picture tube.	Trinitron tube.
	Approx. 28 cm (11 inches)
	(Approx. 26 cm picture measured diagonally)
	90°-degree deflection.
Inputs.	Y/C input : S connector.
	2 Video input : Phono jack.
	Audio input : Phono jack.
	(R,G,B) 1 21 pin Euro connector.
Outputs.	AV 21-pin connector : CENELEC standard
	Headphone jack : minijack
Sound Output.	2.5W (Music Power)
Power Requirement.	220-240V AC
	12-24V DC
Power consumption.	55 Wh
Dimensions.	Approx 296x261x329mm (w/h/d)
Weight.	Approx. 8.5 kg
Supplied accessories.	RM-828 Remote Commander (1)
	AA size R6 batteries (2)
	Telescopic antenna (1)
	DC Power cord (1)
	AC Power cord (1)

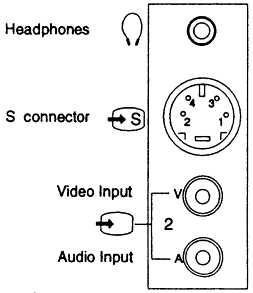
[RM-828]

Remote control system	infrared control.
Power requirements.	3V dc
	2 batteries IEC designation
	R6 (size AA)
Dimensions.	Approx. 55 x 183 x18mm (w/h/d)
Weight.	Approx. 130g (including batteries)

Design and specifications are subject to change without notice.

TRINITRON® COLOR TV
SONY®

Connector Configuration



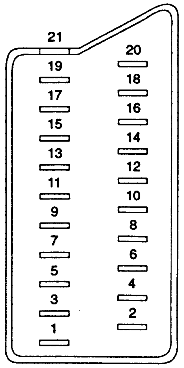
4 pin connector [⇥S]

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3db 75ohm, positive Sync 0.3V
4	C (S signal) input	0.3V ± 3db 75ohm positive

Pin No	1	Signal	Signal level
1	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : less than 1Kohm. *
2	○	Audio inout B (right)	Standard level : 0.5Vrms Input impedance : More than 10Kohm. *
3	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : less than 1Kohm. *
4	○	Ground (audio)	
5	○	Ground (blue)	
6	○	Audio input A (left)	StAndard level : 0.5Vrms Input impedance : more than 10Kohms. *
7	○	Blue input	0.7V +/- 3dB 75ohms positive
8	○	Function select (AV control)	High state (9.5 - 12 V) : Part mode Low state (0 - 2 V) : TV mode Input impedance : more than 10Kohms Input capacitance : Less than 2nF
9	○	Ground (green)	
10	○	Open	
11	○	Green	Green signal : 0.7V +/- 3dB 75ohms, positive
12	○	Open	
13	○	Ground (red)	
14		Ground (blanking)	
15	○	Red input	0.7V +/- 3dB. 75ohms. positive
	—	(S signal) chroma input	0.3V +/- 3dB. 75ohms. positive
16	○	Blanking input (Ys signal)	High state (1 - 3 V) Low state (0 - 0.4 V) Input impedance : 75ohms
17	○	Ground (video output)	
18	○	Ground (video input)	
19	○	Video output	1V +/- 3dB. 75ohms. positive Sync : 0.3V (-3. +10dB)
20	○	Video input	1V +/- 3dB. 75ohms. positive Sync : 0.3V (-3. +10dB)
	—	Video Input /Y (S signal)	1V +/- 3dB. 75ohms. positive Sync : 0.3V (-3. +10dB)
21	○	Common ground (plug shield)	

○ connected

* at 20Hz - 20kHz



21 pin connector (⇥ 1.)

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL

1-1. Identification of Parts 4
1-2. Setting up your TV 5
1-3. Presetting 6
1-4. Setting Clock and Date 8
1-5. Setting up Security Code 9
1-6. Watching TV Programms 10
1-7. Adjusting the picture 11
1-8. Using other Equipment 11
1-9. Operating the TV using on-set buttons 12
1-10. Other Menu features 12
1-11. Troubleshooting 14

2. DISASSEMBLY

2-1. Rear Cover Removal 15
2-2. G board Removal 15
2-3. J2 and Y Board Removal 16
2-4. H2 and H3 Board Removal 16
2-5. Service Position 17
2-6. H1 board Removal 18
2-7. Picture tube removal 19

3. SET-UP ADJUSTMENTS

3-1. Beam Landing 20
3-2. Convergence 21
3-3. Focus 23
3-4. Screen (G2) adjustment 23
3-5. White balance Adjustment 23

Section *Title* *Page*

4. CIRCUIT ADJUSTMENTS

4-1. A Board Adjustments 24

5. DIAGRAMS

5-1. Block Diagram 25
5-2. Circuit Board Location 28
5-3. **Schematic Diagrams and Printed Wiring Boards**
A Board Printed Wiring 30
A Board Schematic Diagram 31
H1,H2,H3 Board Schematic Diagram 36
G Board Schematic Diagram 37
Y Board Schematic Diagram 38
H1,H2,Y Board Printed Wiring 39
G,G1,H3 Board Printed Wiring 40
J1,J2,J4 Board Schematic Diagram 41
J1,J2,J4 Board Printed Wiring 42
C Board Schematic Diagram 43
C Board Printed Wiring 44
5-4. Semiconductors 45

6. EXPLODED VIEWS

6-1. Chassis 47
6-2. Picture Tube 48

7. ELECTRICAL PARTS LIST 49

SAFETY RELATED COMPONENT WARNING !!

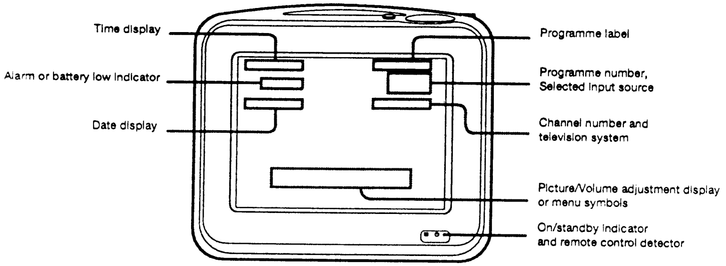
COMPONENTS IDENTIFIED BY SHADING AND MARKED WITH ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Instructions shown here are partial excerpts
from the Instruction Manual.
The pages of the Instruction Manual are included
here in original state.

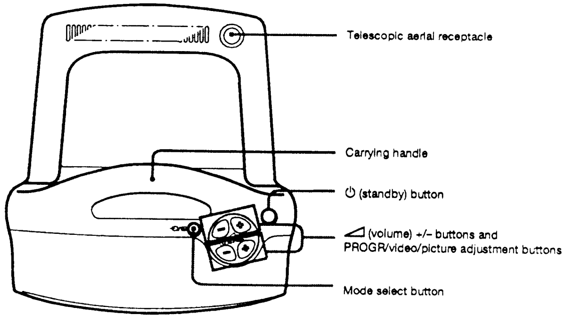
SECTION 1
GENERAL

1-1 Identifying the Parts

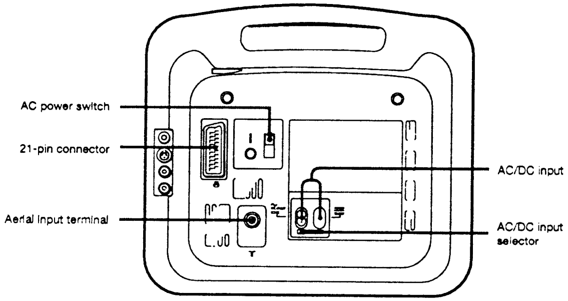
Front indications in the display


Time display
Alarm or battery low indicator
Date display
Programme label
Programme number,
Selected input source
Channel number and
television system
Picture/Volume adjustment display
or menu symbols
On/standby indicator
and remote control detector

Top of the TV

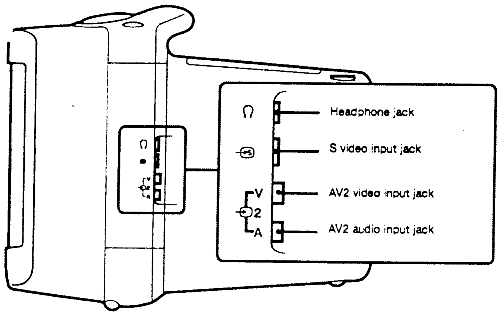

Telescopic aerial receptacle
Carrying handle
⏻ (standby) button
◿ (volume) +/– buttons and
PROGR/video/picture adjustment buttons
Mode select button

Rear of the TV

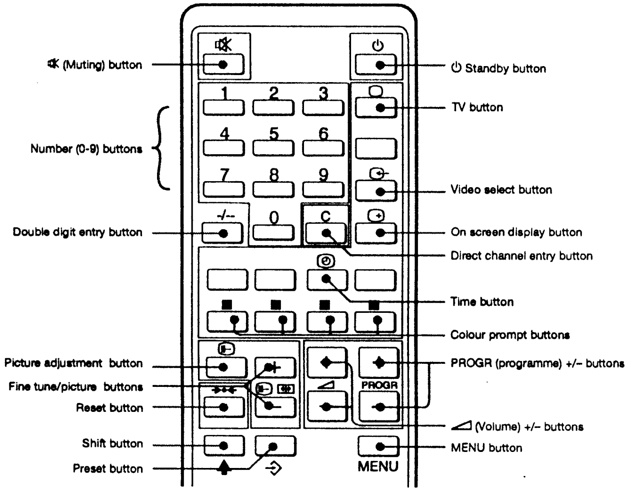

AC power switch
21-pin connector
Aerial input terminal
AC/DC input
AC/DC input
selector

Side View

Note: The symbols marked on the side of the TV correspond to the jacks that appear on the recessed rear of the TV.

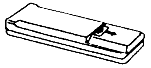

Headphone jack
S video input jack
AV2 video input jack
AV2 audio input jack
V
2
A

[illegible]

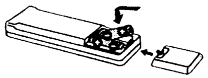

🔇 (Muting) button
Number (0-9) buttons
Double digit entry button
Picture adjustment button
Fine tune/picture buttons
Reset button
Shift button
Preset button
⏻ Standby button
TV button
Video select button
On screen display button
Direct channel entry button
Time button
Colour prompt buttons
PROGR (programme) +/– buttons
◿ (Volume) +/– buttons
MENU button
1
2
3
4
5
6
7
8
9
-/--
0
C
PROGR
MENU

[illegible]

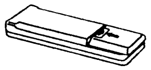
1 Push to open the lid (rear of the Remote Commander.)



2 Insert two size AA (R6) batteries to correct polarity.



3 Replace the lid.



Notes

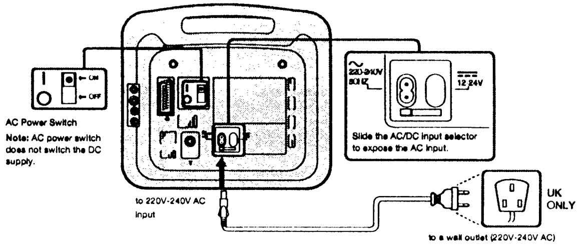
- With normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries when you will not be using the Remote Commander for a fairly long time.
- Be sure that there are no obstructions between the Remote Commander and the TV.
- If you use a Remote Commander that is not recommended to operate this TV, or if you use the supplied Remote Commander to operate other equipment, the equipment may not operate properly.

WARNING
Batteries may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

1-2 Setting up Your TV

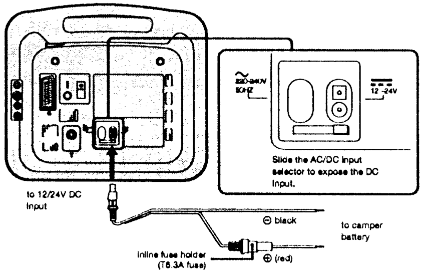
Using at Home (Mains AC)

To watch your TV at home, attach the supplied AC cord to the rear of the TV as shown below.


ON
OFF
AC Power Switch
Note: AC power switch does not switch the DC supply.
220-240V 50Hz
12-24V
Slide the AC/DC input selector to expose the AC input.
to 220V-240V AC input
UK ONLY
to a wall outlet (220V-240V AC)

[illegible] Battery (DC)

You can use the power from your mobile home battery by attaching the supplied DC power cord to the battery using appropriate battery clips (not supplied). There is no separate switch on the TV for DC supply.


220-240V 50Hz
12-24V
Slide the AC/DC input selector to expose the DC input.
to 12/24V DC input
⊖ black
to camper battery
Inline fuse holder (T6.3A fuse)
⊕ (red)

Caution

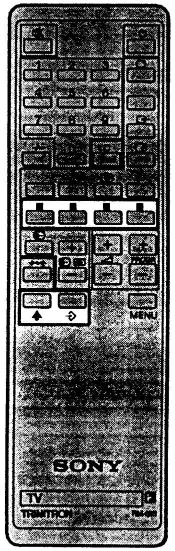
- Do not connect the DC power to AC input or the AC power to the DC input.
- If you connect the DC power cord to the AC power outlet the DC power cord fuse (T6.3A) will burn out. Replace fuse only with the same type.

Low Battery Power Warning
When the battery power falls below 12V, the TV displays a warning and automatically switches off after the warning has been displayed for 30 seconds. Disconnect the TV and recharge the battery before switching the TV on again.

Notes

- For car use, the TV is designed to be used on negative ground, 12-24V DC.
- Use the supplied DC power cord manufactured by Sony. The polarity of other manufacturers' cords may be different.
- When you are not using the TV, disconnect the DC power cord. If you do not, battery power will be lost, even in standby mode.
- In hot temperatures, do not leave the TV in the car for a long time.

1-3 Presetting Channels



As your TV is likely to be used in locations away from home, two tuning methods have been provided:

- Tuning home programmes
For use at home you can preset up to 60 channels into programme position numbers (00-59). These channels are stored indefinitely in the TV's memory.
- Tuning away programmes
For use away from home a simplified auto-tuning function is provided with which you can preset up to 40 channels (60-99). These channels are stored in a temporary memory in the TV, and will be retained for approximately 4 days if the TV is not powered up.

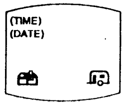
Tuning "HOME" Programmes

1 If using AC (household supply) ensure AC switch is on.

If the TV is in standby mode, turn on the TV by pressing one of the following buttons:

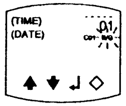
On TV	On Remote Commander
PROGR +/– On-Set button	PROGR +/–
Standby On-Set button ⏻	TV button ▢
	Number (0-9) button

2 Press ⇾ on the Remote Commander while pressing ⬆. The tuning menu appears.



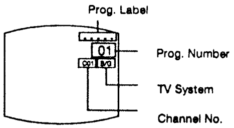
3 Press RED colour prompt button to select HOME (🏠) tuning mode.

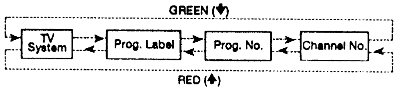
A menu screen as shown will appear.

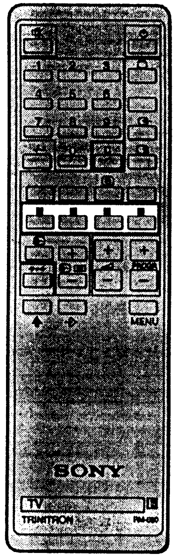


HOME TUNING MENU

4 The TV System is highlighted in red. You can change the highlighted field by using the RED (⬆ on the display) or GREEN (⬇) colour prompt buttons on the Remote Commander.







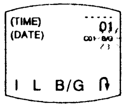
To go back to the normal TV picture
Press ▢ or press ⬆ and ⇾ simultaneously.

Note
For direct channel entry please refer to Presetting Channels Directly on page 12.

Selecting the Television System

1 When the TV System is highlighted in red, press YELLOW colour prompt button (↲) to select the TV System menu.

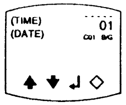
Before step 2 please refer to table at bottom of this page.



2 Press RED colour prompt button (I) to select System I.
Press GREEN colour prompt button (L) to select System L.
Press YELLOW colour prompt button (B/G) to select System B/G.

When the system has been selected, press BLUE colour prompt button (↱).

3 Press BLUE colour prompt button (◇) again to store the television system.

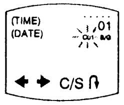


Presetting Channels Automatically

1 Press RED (⬆ on the display) or GREEN (⬇) colour prompt buttons to highlight the Channel Number.

2 Press YELLOW colour prompt button (↲) to select the Channel Number menu.

Press RED (⬅ backward) or GREEN (➡ forward) colour prompt buttons to search for channels backwards or forwards respectively.

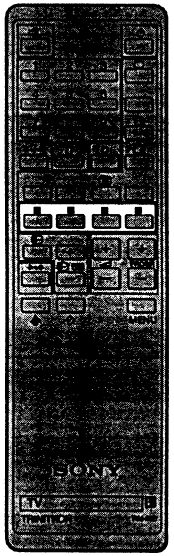


TV SYSTEM

This table indicates the tuning system used by the listed countries.

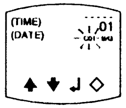
System B/G	Austria Belgium (B/H) Denmark Finland Germany Greece Iceland Italy Luxembourg (*)	Monaco (*) Netherlands Norway Portugal Spain Sweden Switzerland Yugoslavia (B/H)
System L	France (*) Monaco (*) Luxembourg	
System I	Ireland United Kingdom	

(*) Luxembourg and Monaco can receive both Systems B/G and L.

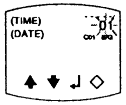


To go back to the normal TV picture
Press ○ or press ▲ and ➪ simultaneously.

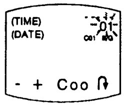
3 When the required channel has been found, press BLUE colour prompt button (↻) to return to the main HOME tuning menu.



4 Press RED (▲ on the display) or GREEN (▼) colour prompt buttons to highlight the Programme Number field in which the channel is to be stored.

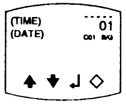


5 Press YELLOW colour prompt button (↵) to select the Programme Number menu.



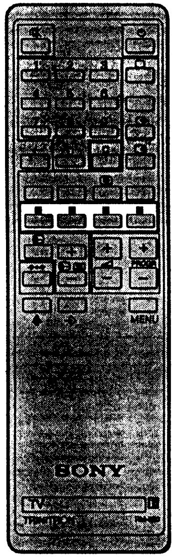
6 Press RED (–) or GREEN (+) colour prompt buttons to decrement/increment the programme number respectively. Alternatively, you can enter a new programme number by using the number buttons directly. (When using the number buttons to enter a programme number less than 10, it is necessary to first enter a "0" digit e.g. 09)
The YELLOW colour prompt button (Coo) can be used to clear the programme.

7 After setting the required programme number, press BLUE colour prompt button (↻) to return to the main HOME tuning menu.



8 Press BLUE colour prompt button (◇) again to store.

9 Repeat steps 1 - 8 for other channels.



To go back to the normal TV picture
Press ○ or press ▲ and ➪ simultaneously.

The procedure for presetting channels directly is the same as for presetting channels automatically, but with the following exception.

In the channel number menu press the number buttons to enter the channels directly. You can also use the YELLOW colour prompt button (C/S) to toggle between "C–" and "S–" type channels (off air and cable channels).

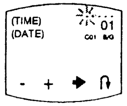
Skipping Programmes

You can skip over unprogrammed channels by pressing PROGR +/– during normal TV mode.

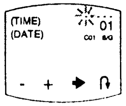
Programme Labelling

You can name a channel to be stored using five characters (letters or numbers). Using this function you can easily identify which channel you are watching.

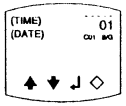
1 Using the Home tuning menu Press RED (▲ on the display) or GREEN (▼) colour prompt button to highlight the Programme Identifier field and then press YELLOW colour prompt button (↵) to select it.
The first character position in the Programme Identifier field will flash, indicating that this character can be changed.



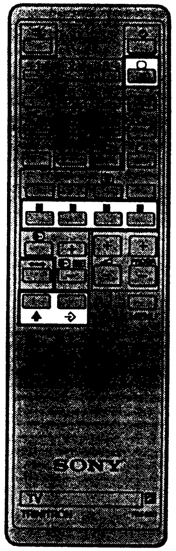
2 Press RED (–) or GREEN (+) colour prompt buttons to step down/up respectively through the available characters.
After setting the first character position correctly, press YELLOW colour prompt button (➡) to step on to the next character position to be changed.
Repeat the above procedure until all five positions have been correctly set. (Note: when a "–" is shown in a character position, this will be displayed as a space " " in normal TV mode).



3 After setting the programme identifier, press BLUE colour prompt button (↻) to return to the main HOME tuning menu.



4 Press BLUE (◇) to store the new programme identifier.



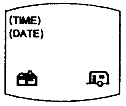
Note
Channel information stored in AWAY mode is held in temporary memory and will be retained for approximately 4 days if the power cord is disconnected.

Programme identifiers are not available for AWAY channels.

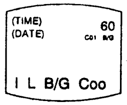
To go back to the normal TV picture
Press ▢ or press ♠ and ⇾ simultaneously.

Tuning "AWAY" Programmes

1 While pressing the ♠ (shift) button, press ⇾ to enter the tuning menu.



2 Press GREEN colour prompt button to select AWAY tuning mode.



A menu screen as shown will appear. You can programme the channels into the programme numbers 60-99. The programme number displayed will be the first unprogrammed position available in the range 60-99

3 Press RED (I), GREEN (L) or YELLOW (B/G) colour prompt buttons to automatically tune and store the available channels.

Press RED colour prompt button for channels in system I.
Press GREEN colour prompt button for channels in system L
Press YELLOW colour prompt button for channels in system B/G (see table at bottom of page).

The BLUE colour prompt button (Coo) can be used to clear all programme positions from 60 to 99.
To stop search, press ▢.

You can skip over unprogrammed channels when you press PROGR + or PROGR – buttons during normal TV mode.

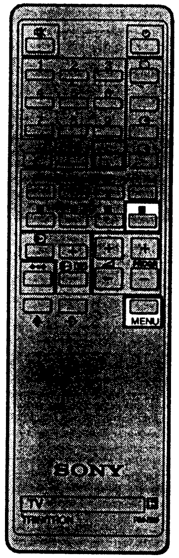
TV SYSTEM

This table indicates the tuning system used by the listed countries.

System B/G	Austria Belgium (B/H) Denmark Finland Germany Greece Iceland Italy Luxembourg (*) Monaco (*) Netherlands Norway Portugal Spain Sweden Switzerland Yugoslavia (B/H)
System L	France (*) Monaco (*) Luxembourg
System I	Ireland United Kingdom

(*) Luxembourg and Monaco can receive both Systems B/G and L.

1-4 Setting Clock and Date

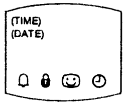


If you have made a mistake
Restart from the first step.

Note
If the parental lock (refer to page 22) code has been previously set you will be required to enter the correct parental lock code before being allowed to change the time and date.

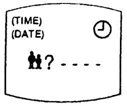
This is a 24 hour clock system.

1 Press MENU to enter the main function menu.



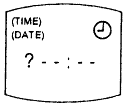
Note: If the Clock/Date has not been previously set or if the TV has been powered off for approximately 4 days, the menu screen shown in step 3 appears directly on pressing the MENU button.

2 Press BLUE (◷) to select Time/Date mode.

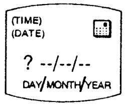


3 Enter the Parental Code. If you preset for the first time or forget the current Parental Code enter the factory preset code "4489".

Time setting display appears.



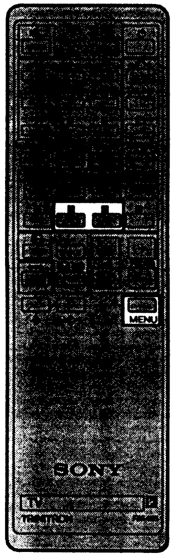
4 Enter the time using the number buttons.



5 Enter the date using the number buttons. If you do not wish to change the date, press "TV" (▢) to go back to the normal TV picture.

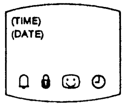
When the date has been entered, you will return to TV mode automatically.

1-5 Setting the Security Code

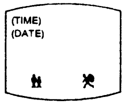


The security code can be used as an anti-theft precaution. If the Security Code is active and the TV has been disconnected from the power supply (AC or DC), when the TV is next powered up you must re-enter the 6 number Security Code to view any programmes.

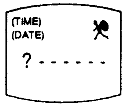
1 Press MENU to enter the main function menu.



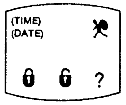
2 Press GREEN colour prompt button (🔒) to select the lock functions menu.



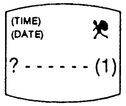
3 Press GREEN colour prompt button (🏃 on the display) again to select the security lock function.



4 If you preset for the first time enter the factory preset code "112093" otherwise, enter the current security code to enter the security lock menu.

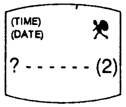


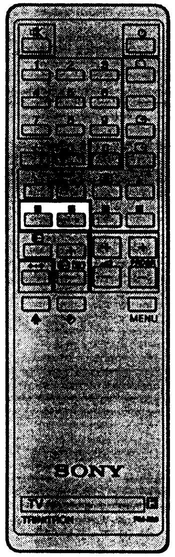
5 Press YELLOW colour prompt button (?) to set your security lock code.



6 Enter a new security lock code (6 digits) using the number buttons.

Note: For security reasons, as numbers are entered they are displayed as "*" on the screen.

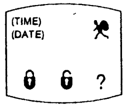




7 After entering the new code enter the same code again.

Both entries must be the same otherwise you will be requested to try again.

After the second entry the security code menu appears.

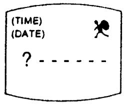


8 Press RED colour prompt button (🔒) to engage the security lock.

Press GREEN colour prompt button (🔓) to disengage the security lock.

You will return to the TV mode automatically.

If security code is enabled and the TV has been disconnected from the power supply (AC or DC), when the TV is next powered up you must re-enter the 6 number security code to view any programmes.



Three attempts at entering the security code will be allowed. If three successive incorrect codes are entered the TV will enter STANDBY mode and further attempts will not be allowed for approximately 4 - 5 minutes. As numbers are entered they will be displayed as "*" on the screen.

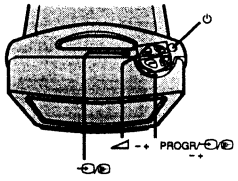
If you forget the security code you will need to return the set to the nearest Sony Service Centre so that the code can be reset. Therefore we strongly advise that you make a note of your code in the box below:

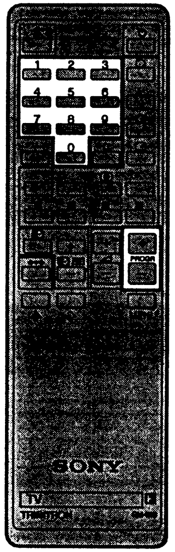
SECURITY CODE						

When leaving the factory the Security Code is preset to "112093"

1-6

Watching TV Programmes



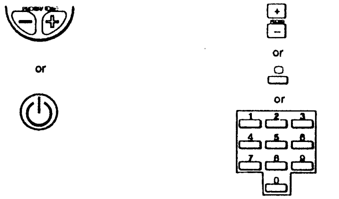


Preset channels first, following the instructions given on pages 9-14.

1 If using AC (household supply) ensure AC switch is on.

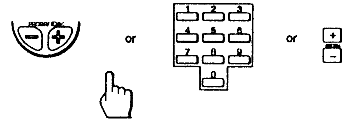
If the TV is in standby mode, turn on the TV by pressing one of the following buttons:

On TV	On Remote Commander
PROGR +/– On-Set button	PROGR +/–
Standby On-Set button ⏻	TV button ○
	Number (0-9) button

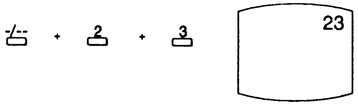


If the TV set is in standby mode the LED indicator at the front of the set is red, otherwise the front LED is green.

2 Press PROGR +/– on the TV or Remote Commander, or press the 0-9 buttons to select the programme you want to watch.



Press -/-- first to select a double digit programme number.
For example to select programme number 23, press -/--, 2 and 3.



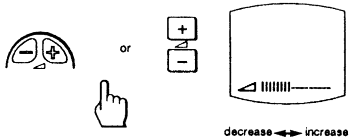
To listen to the TV/video sound through headphones
Connect a headphone (not supplied) to the headphone jack at the side of the TV (see page 5).

To turn the TV off
Press the standby button on either the TV or Remote Commander, the TV will go into standby mode.

To turn the power off completely
disconnect the power cord, or press the AC switch to "OFF" position. (AC mode only)

3 Press volume +/– on the TV or Remote Commander to adjust the volume.

Press + to increase the volume.
Press – to decrease the volume.



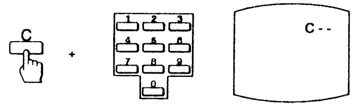
decrease ◀▶ increase

[illegible]

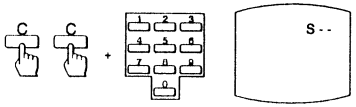
If you know the channel frequency number, you can tune a channel temporarily, without presetting.

Press "C" to select the mode you want to watch. (Press once to select regular TV mode: press twice to select cable TV mode.) Then press the number buttons (0-9) to select the channel. If you enter an incorrect channel number, the TV will briefly display "CXX" or "SXX" and ignore the entry.

Note: You can receive the displayed channel but it will not be stored by the TV.

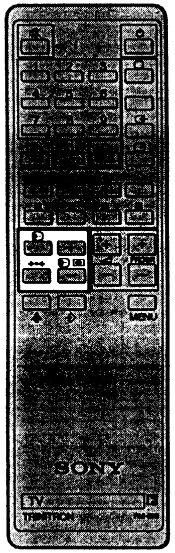


TV mode



Cable mode

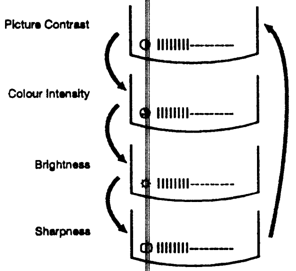
1-7 Adjusting the Picture



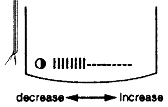
Restoring the Factory Preset Levels
To restore the factory preset levels, press ⟷ (Reset) on the Remote Commander.

Use the picture adjustment feature to adjust the TV or video input picture to your requirement.

1 Press the picture adjust button (◐)to enter picture adjustment mode. Each press will change the selection to be adjusted. Picture, colour, brightness, sharpness, (also hue – if receiving a NTSC signal).

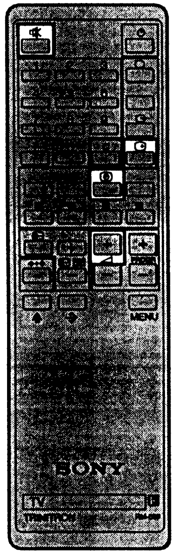


2 Press picture adjustment +/– to make the adjustment. + to increase the level, – to decrease the level.



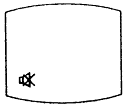
The display will disappear automatically if no button is pressed for a few seconds.

1-8 Using Other Convenient Features



[illegible]

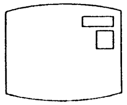
To mute the sound, press 🔇 on the Remote Commander.



To restore the sound, press 🔇 again or ◢ (volume +) on the Remote Commander or On-Set buttons.

Displaying the Input Mode [illegible]

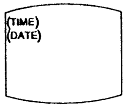
Press Display on Screen ⊕ on the Remote Commander to keep the current TV programme number or video mode displayed on the screen.



To cancel the display, press ⊕ again.

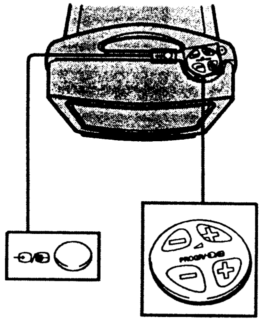
Displaying the Time on the Screen

To display the time on the screen press ◷ (Clock) on the Remote Commander. On first display the DATE and SECONDS also appear.



To cancel the time display press ◷ (Clock) again.

1-9 Operating the TV Using On-Set Buttons



Note
Hue is only available for NTSC colour system.

Note
If the On-Set buttons are not pressed within 5 seconds the TV goes back to normal TV picture.

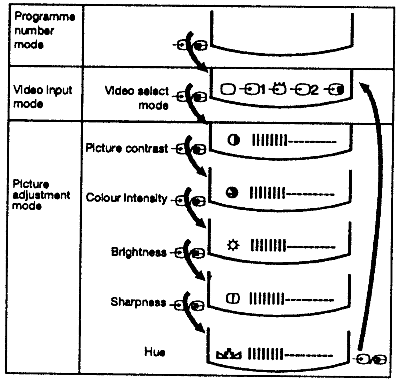
Operating TV using on-set buttons

To change the volume press ◢ -/+

To change the programme press PROGR/-⊖/⊕ -/ + button.

Selecting video input and picture adjustment

Press the mode select button successively to select video mode or picture adjustment modes, i.e. video mode, picture, colour, brightness, sharpness.
Adjustment can then be made by the PROGR/-⊖/⊕ -/+button.

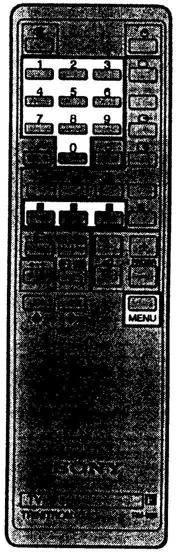

Programme number mode
Video input mode
Video select mode
Picture adjustment mode
Picture contrast
Colour intensity
Brightness
Sharpness
Hue
1
2

If the mode select On-Set Button has not been pressed within the last 5 seconds (approx.) then the PROGR/-⊖/⊕ -/+button will recover its normal function of adjusting programme numbers.

To adjust the video mode using On-Set Buttons
The Video mode menu must be displayed on the bottom of the screen (as above). The PROGR/-⊖/⊕ -/+buttons then toggle the video modes forward/backward with the selected video mode highlighted in red.

To adjust any of the picture quality levels
The mode select button must be used to select the level to adjust, then the PROGR/-⊖/⊕ -/+ will adjust the level.

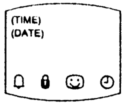
1-10 Other Menu Features


1
2
3
4
5
6
7
8
9
0
MENU

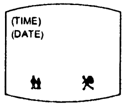
You can use Parental Lock to prevent the TV being used by (for example) children between predefined times.

A parent can select a Lock "ON" time (e.g. 21:00) and a Lock "OFF" time (e.g. 08:00) such that during the period 21:00 - 08:00 access to programmes is denied unless a 4 digit "parental lock code" is entered.

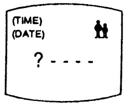
1 Press MENU to enter the main function menu.



2 Press GREEN colour prompt button (🔒) to select the lock functions menu.

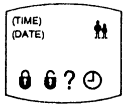


3 Press RED colour prompt button (👪) to select the Parental Lock function.

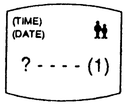


4 If you preset for the first time enter the factory preset code "4489" otherwise enter the current parental code to enter the Parental Lock menu.

Note: If you don't wish to set a new Parental Lock code go to step 8.

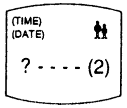


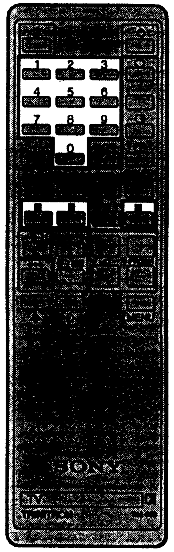
5 Press YELLOW colour prompt button (?) to set a new parental lock code.



6 Enter a new parental lock code (4 numbers) using the number buttons.

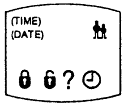
Note: For security reasons, as numbers are entered they are displayed as "*" on the screen.





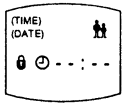
Note: It is necessary to enter both parental lock ON and OFF times. If this is not done the previously set times will still be effective. If you should forget the set parental code, then the code "4489" will allow you access.

7 After entering the new code, enter the same code again. Both entries must be the same, otherwise you have to try again.



After the second entry, the parental code menu appears.

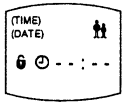
8 Press BLUE colour prompt button (◷) to select the parental lock ON screen.
The previously set parental lock ON time appears.



9 Press the number buttons to set the parental lock ON time.

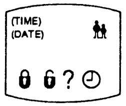
Note: You have to set the time using the 24 hour clock system.
e.g. 7 p.m. is entered as 19:00.

After entering the parental lock ON time, the parental lock OFF screen appears. The previously set parental lock OFF time will be shown



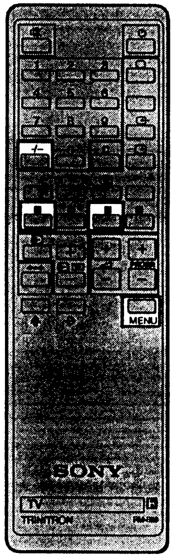
10 Press the number buttons to set the parental lock OFF time.
After setting the parental lock OFF time you will be returned to the parental lock menu screen.

Press RED colour prompt button (🔒) to enable the parental lock.
Press GREEN colour prompt button (🔓) to disable the parental lock.
(Pressing either button will return you to the normal TV mode).



Other Menu Features

To stop Demo feature press any button.



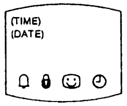
Alarm clock
The TV must be either powered on or be in standby mode for the Alarm to operate.

To cancel alarm clock
Press -/-- button in Step 3.

The Demo feature consists of a series of On Screen Display demonstrations.

It begins with the Sony logo, followed by a list of the TV features and a run through of the various menu screens used.

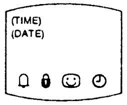
1 Press MENU to enter the main function menu.



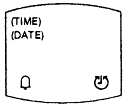
2 Press YELLOW colour prompt button (☺) to access the "Demo" feature.

This TV has an alarm clock. The alarm will sound for one minute.

1 Press MENU to enter the main function menu.

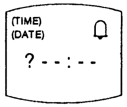


2 Press RED colour prompt button (🔔) to select the Alarm/Sleep functions menu.



3 Press RED colour prompt button (🔔) to enter the Alarm Clock menu.

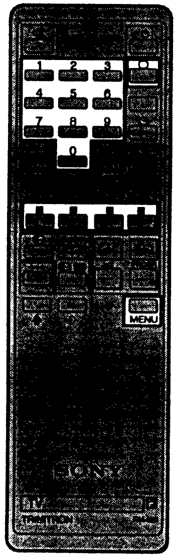
The time shown will be the previously set time.



To stop the alarm
Press any button on the Remote Commander or on TV.

4 Press the number buttons to enter the Alarm time.
You should enter the time using the 24 hour clock system.

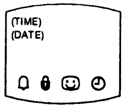
After entering the Alarm time you will be returned to the normal TV operating mode.



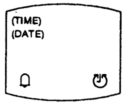
To switch off the timer
Press RED in Step 4.

You can use the Sleep Timer to set a time after which the TV will be automatically switched into standby mode.

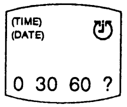
1 Press MENU to enter the main function menu.



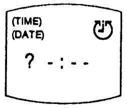
2 Press RED colour prompt button (🔔) to select the Alarm/Sleep functions menu.



3 Press GREEN colour prompt button (⏲) to enter the Sleep Timer menu



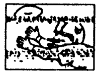
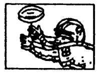
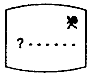
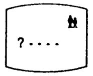
4 Set the time duration using one of the following colour prompt buttons.
- Press RED (0) to disengage sleep timer if already set.
- Press GREEN (30) to set to 30 minutes.
- Press YELLOW (60) to set to 60 minutes.
- Press BLUE (?) to set any time you want up to 9 hours 59 minutes using the number buttons.



On entering this time you will be returned to normal TV operating mode.

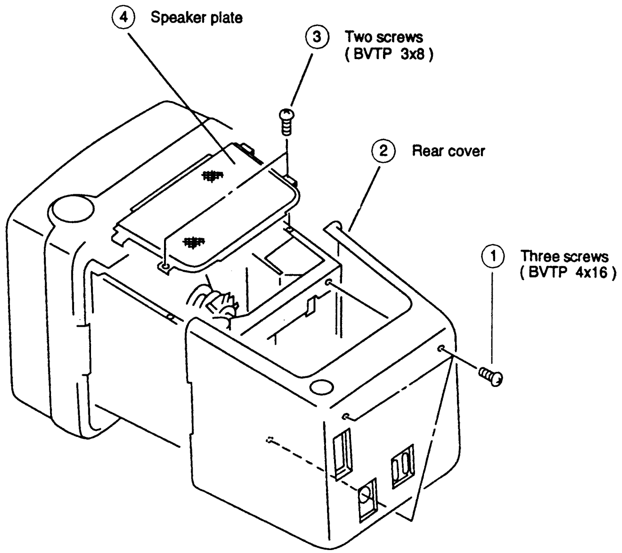
1-11 Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, please contact your nearest service facility.

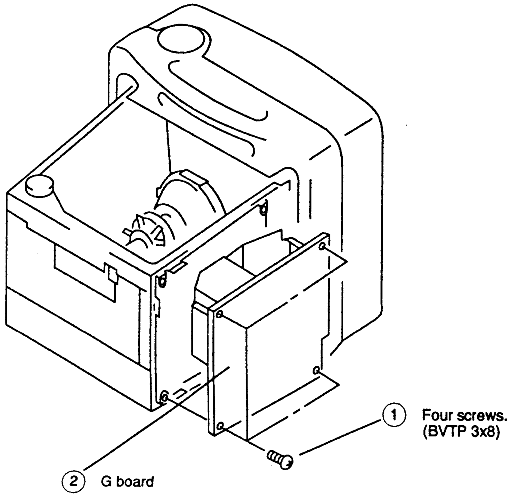
Symptom	Possible causes and remedies
No picture (screen not lit), no sound	• Ensure the TV is plugged in. • Check the aerial connection. • Check the TV/VIDEO input setting. • Turn the TV off for 3 or 4 seconds then turn it on again. • Check AC power switch is ON. • Check TV is on stand-by or not
Poor or no picture (screen not lit), good sound	• Adjust the picture with the picture adjustment buttons. • Adjust the telescopic aerial.
Good picture, no sound	• Press the VOLUME + button on the TV or Remote Commander. • Disconnect the headphones. • If the mute symbol is displayed on the screen press the mute symbol on the remote commander or press VOLUME +.
No colour for colour programmes	• Adjust the colour with the colour adjustment buttons. • Adjust the telescopic aerial.
Poor colour (DC operating mode)	• Switch to 240V AC operation then return to DC operation.
Snow and noise	• Check that it is an active or correct channel. • Check the cable setting. • Check aerial/cable connections.
 Dotted lines or stripes	• This is often cause by local interference (for example cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.
 Double images or ghosts	• Reflections from nearby mountains or buildings often cause this problem. Connecting CATV cable may improve the picture.
	• Security lock is engaged, enter your current security lock code. If you incorrectly enter you security code 3 times the TV will enter STANDBY mode and further attempts will not be allowed for approximately 4-5 minutes. Should you forget the security code contact your nearest Sony Service Centre.
	• Parental Lock is engaged, enter your current Parental Lock code.
Try another channel. It could be station trouble.	

SECTION 2
DISASSEMBLY

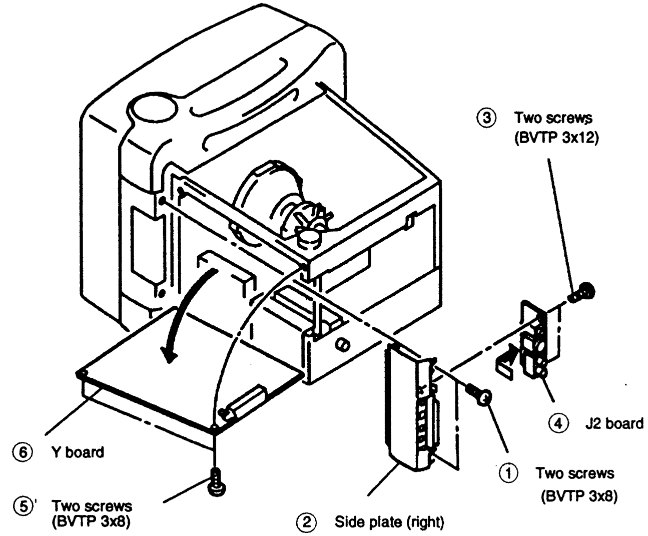
2-1. REAR COVER REMOVAL


④ Speaker plate
③ Two screws
(BVTP 3x8)
② Rear cover
① Three screws
(BVTP 4x16)

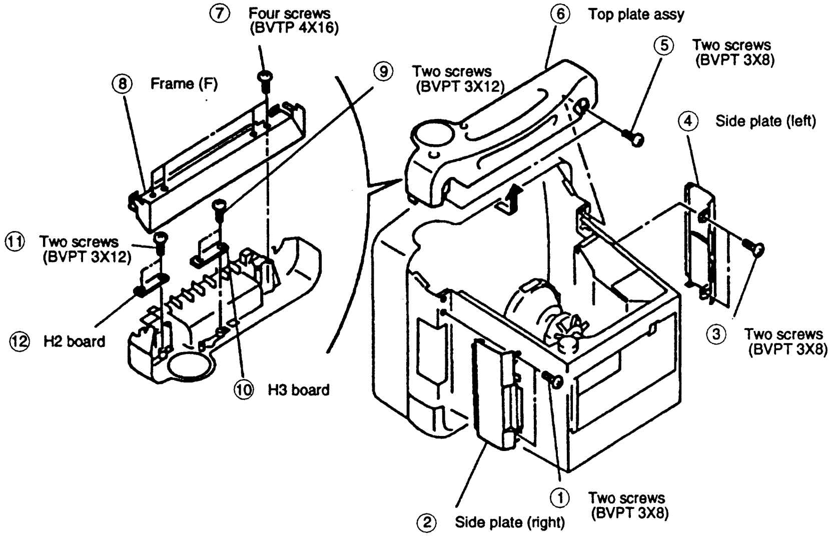
2-2. G BOARD REMOVAL


① Four screws.
(BVTP 3x8)
② G board

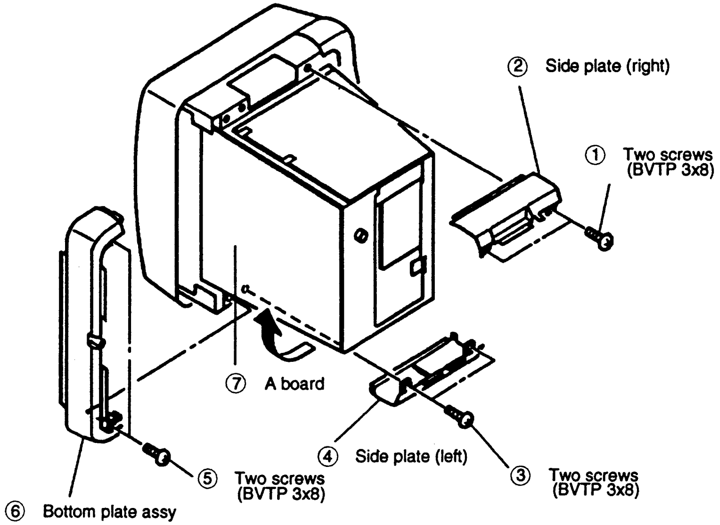
2-3. J2 AND Y BOARD REMOVAL


③ Two screws
(BVTP 3x12)
④ J2 board
⑥ Y board
① Two screws
(BVTP 3x8)
⑤' Two screws
(BVTP 3x8)
② Side plate (right)

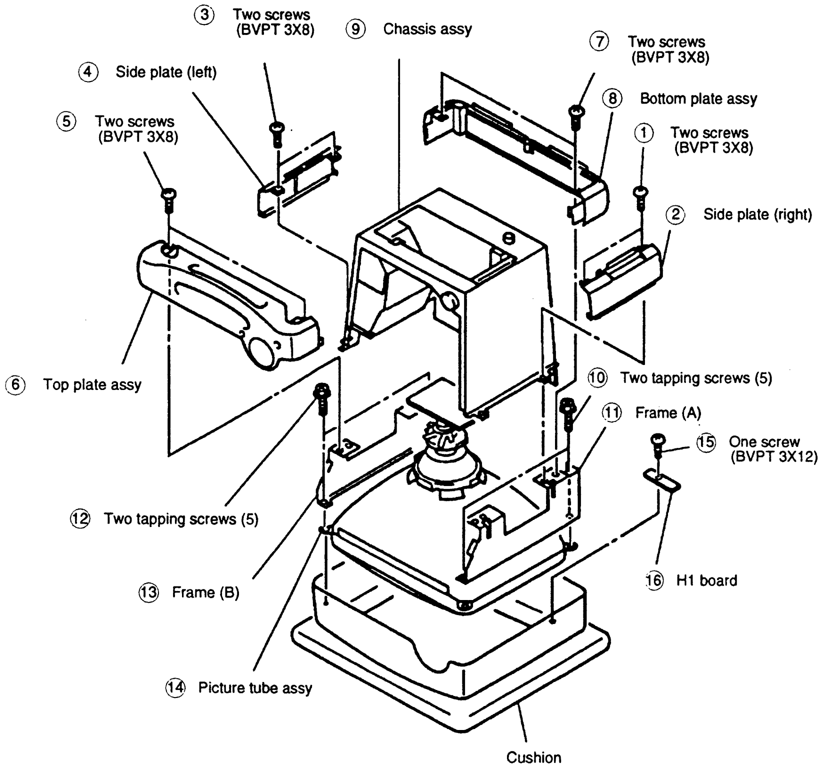
2-4. H2 AND H3 BOARD REMOVAL


⑦ Four screws
(BVTP 4X16)
⑥ Top plate assy
⑤ Two screws
(BVPT 3X8)
⑧ Frame (F)
⑨ Two screws
(BVPT 3X12)
④ Side plate (left)
⑪ Two screws
(BVPT 3X12)
⑫ H2 board
③ Two screws
(BVPT 3X8)
⑩ H3 board
① Two screws
(BVPT 3X8)
② Side plate (right)

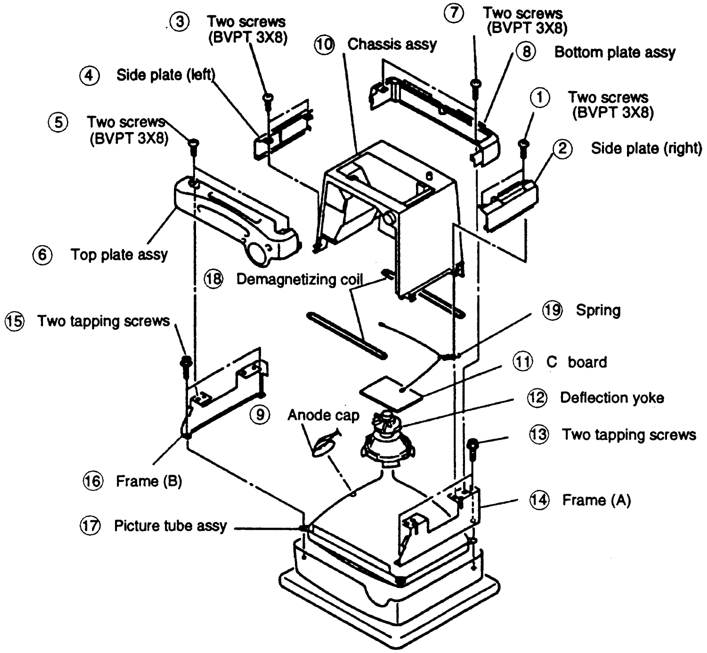
2-5. SERVICE POSITION


② Side plate (right)
① Two screws
(BVTP 3x8)
⑦ A board
④ Side plate (left)
⑤ Two screws
(BVTP 3x8)
③ Two screws
(BVTP 3x8)
⑥ Bottom plate assy

2-6. H1 BOARD REMOVAL


③ Two screws (BVPT 3X8)
⑨ Chassis assy
⑦ Two screws (BVPT 3X8)
④ Side plate (left)
⑧ Bottom plate assy
⑤ Two screws (BVPT 3X8)
① Two screws (BVPT 3X8)
② Side plate (right)
⑥ Top plate assy
⑩ Two tapping screws (5)
⑪ Frame (A)
⑮ One screw (BVPT 3X12)
⑫ Two tapping screws (5)
⑬ Frame (B)
⑯ H1 board
⑭ Picture tube assy
Cushion

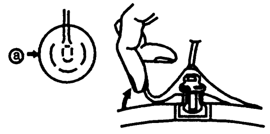
2-7. PICTURE TUBE REMOVAL


③ Two screws (BVPT 3X8)
⑩ Chassis assy
⑦ Two screws (BVPT 3X8)
⑧ Bottom plate assy
④ Side plate (left)
① Two screws (BVPT 3X8)
⑤ Two screws (BVPT 3X8)
② Side plate (right)
⑥ Top plate assy
⑱ Demagnetizing coil
⑲ Spring
⑮ Two tapping screws
⑪ C board
⑫ Deflection yoke
⑨ Anode cap
⑬ Two tapping screws
⑯ Frame (B)
⑭ Frame (A)
⑰ Picture tube assy

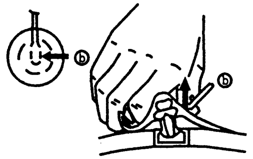
• REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

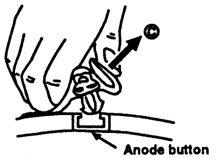
*** REMOVING PROCEDURES.**



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ


ⓒ
Anode button

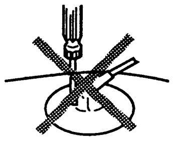
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

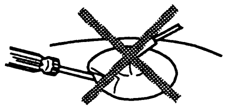
• HOW TO HANDLE AN ANODE-CAP

① Don't damage the surface of anode-cap with sharp shaped material !

② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built into the rubber.

③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or damage the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch below should be set as follows unless otherwise noted:

◑ CONTRAST control.......80%(or Normal by commander)
☼ BRIGHTNESS control.....50%

Perform the adjustments in order as follows:

1. Beam landing
2. Convergence
3. Focus
4. Screen (G2) and White Balance

Note: Testing equipment required
1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Preparation:

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

Demagnetize with a degausser.

1. Input a raster signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backwards, and adjust with the purity control so that the red is in the centre and the blue and the green are at the sides evenly.
   (see Fig. 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that entire screen becomes red. (See Fig. 3-1.)
5. Switch the raster signal to blue, then to green and verify the condition.
6. When the position of the deflection yoke is determined, fasten the deflection yoke with the screws.
7. When landing at the corner is not correct, adjust by using disk magnets.
   (See Fig. 3-4.)

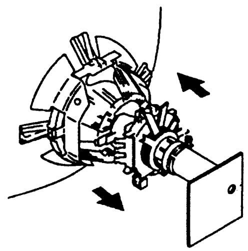


Fig. 3-1

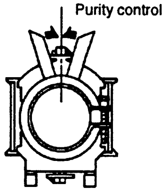

Purity control

Fig. 3-2

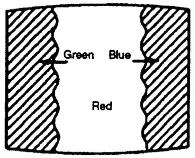

Green
Blue
Red

Fig. 3-3

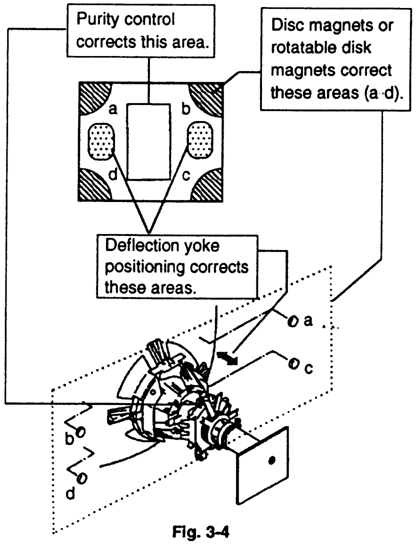

Purity control corrects this area.
Disc magnets or rotatable disk magnets correct these areas (a-d).
a
b
c
d
Deflection yoke positioning corrects these areas.
a
c
b
d

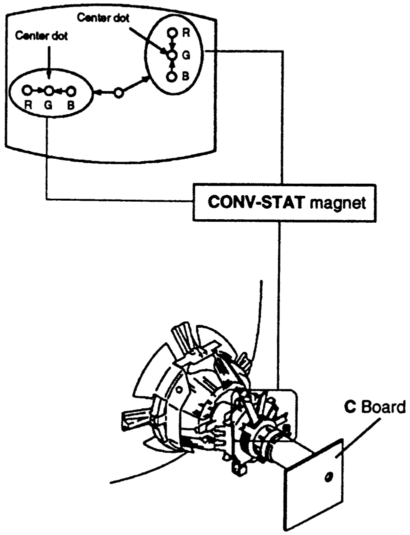
Fig. 3-4

3-2. CONVERGENCE

Preparation :

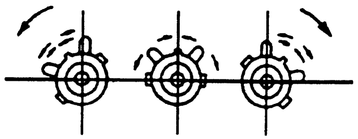
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in dot pattern.

(1) Horizontal and vertical static convergence

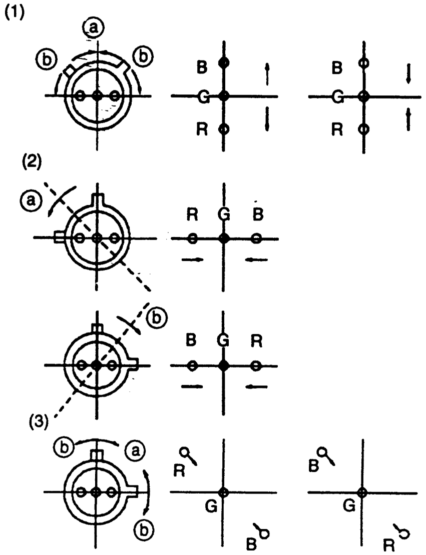

Center dot
Center dot
R
G
B
R
G
B
CONV-STAT magnet
C Board

1. Adjust CONV-STAT Magnet to coincide red, green and blue dots at the center of the screen.

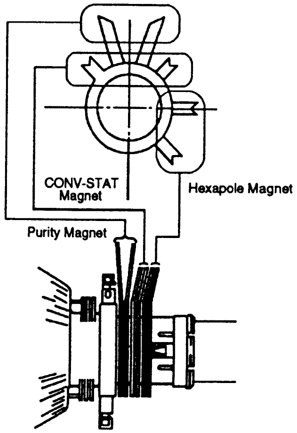
- Tilt the CONV-STAT magnet and adjust the static convergence to open or close the CONV-STAT magnet.



2. When the CONV-STAT magnet is moved in the direction of arrow ⓐ and ⓑ, Red, Green and Blue dots move as shown below.

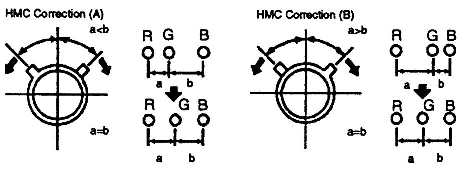

(1)
ⓐ
ⓑ
ⓑ
B
G
R
B
G
R
(2)
ⓐ
R
G
B
ⓑ
B
G
R
(3)
ⓑ
ⓐ
ⓑ
R
G
B
B
G
R

※ IF the red and green dots do not coincide with the blue dot, adjust with BMC(6-pole) magnet.

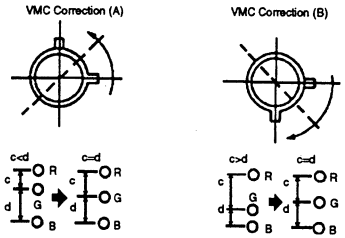

CONV-STAT Magnet
Hexapole Magnet
Purity Magnet

- HMC and VMC correction for BMC (6-pole) magnet.

1. HMC (Horizontal Misconvergence) correction and motion of the Electron Beam with the BMC (6-pole) magnet.


HMC Correction (A)
a<b
R G B
a b
a=b
HMC Correction (B)
a>b
R G B
a b
a=b

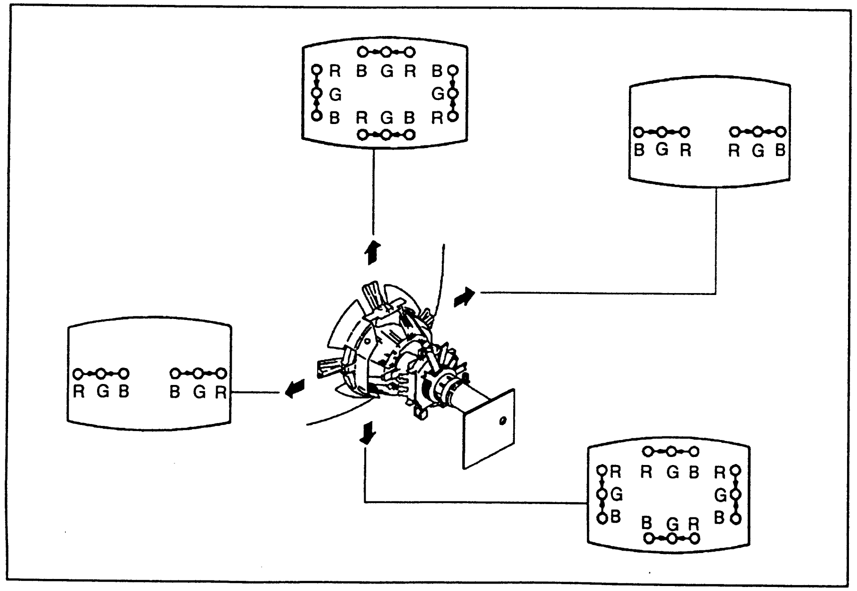
2. VMC (Vertical Misconvergence) correction and motion of the Electron Beam with the BMC (6-pole) magnet.


VMC Correction (A)
c<d
c=d
R G B
c d
VMC Correction (B)
c>d
c=d
R G B
c d

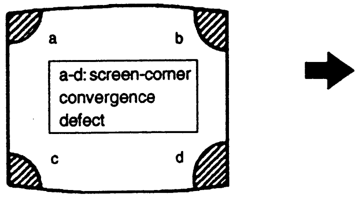
(2) Dynamic Convergence Adjustment Preparation :

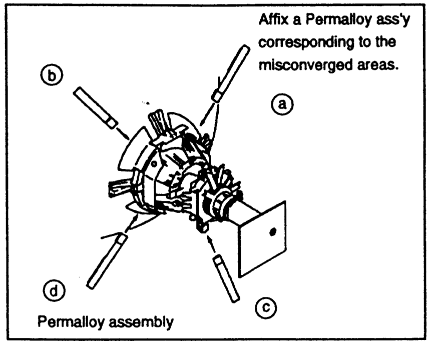
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacers.
3. Move the deflection yoke for the best convergence as shown below.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.


R B G R B
G G
B R G B R
B G R R G B
R G B B G R
R R G B R
G G
B B G R B

(3) Screen Corner Convergence.

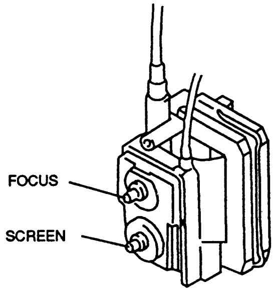

a
b
a-d: screen-corner convergence defect
c
d


Affix a Permalloy ass'y corresponding to the misconverged areas.
ⓑ
ⓐ
ⓓ
ⓒ
Permalloy assembly

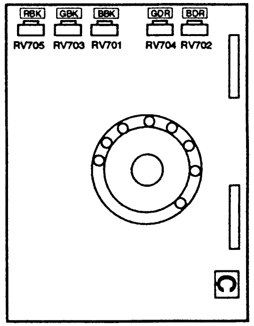
3-3. FOCUS.

1. Input a monoscope signal.
   Contrast } normal
   Brightness
2. Adjust the FOCUS control (located on the Fly-back transformer) for the best picture at the center and both sides of the screen.

3-4. SCREEN G2 SETTING.


FOCUS
SCREEN

1. Input a dot signal from pattern generator.
2. Set the picture brightness control to minimum.
3. Apply 150V DC to the cathodes KR,KB and KB of the CRT from an external power source.
4. While watching the picture adjust the SCREEN control (located on the Fly-back transformer) fully counter clockwise then **slowly** clockwise to the point where the picture just appears.


RBK
GBK
BBK
GDR
BDR
RV705
RV703
RV701
RV704
RV702

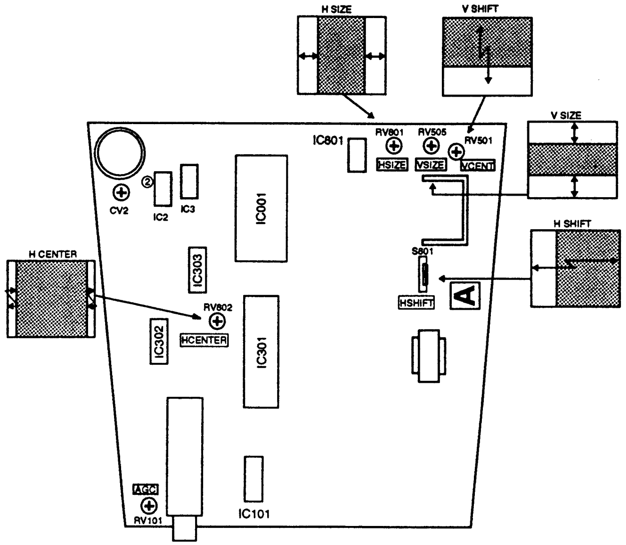
C BOARD (COMPONENT SIDE)

3-5. WHITE BALANCE.

1. Ensure that the SCREEN G2 setting is adjusted correctly before carrying out the following adjustments.
2. Input an all white signal from the pattern generator.
3. Turn all background VRs (RV701, RV703, RV705) to minimum.
4. Adjust the Blue and Green drive VRs (RV702, RV704) to the center of their range.
5. Turn picture to minimum using Remote Commander.
6. Increase RED background VR RV701 so that the RED is just visible.
7. Increase BLUE background VR RV705 to obtain MAGENTA.
8. Increase the GREEN background VR RV703 to obtain OFF WHITE.
9. Set the picture to maximum using the Remote Commander.
10. Observe the screen and adjust the drive VRs (RV702, RV704) for best WHITE BALANCE.
11. For best results repeat steps 2-10 several times.

SECTION 4
CIRCUIT ADJUSTMENT

4-1. A BOARD ADJUSTMENTS


H SIZE
V SHIFT
V SIZE
H SHIFT
H CENTER
IC801
RV801
RV505
RV501
HSIZE
VSIZE
VCENT
②
CV2
IC2
IC3
IC001
IC303
S801
HSHIFT
A
RV802
HCENTER
IC302
IC301
AGC
RV101
IC101

A BOARD (COMPONENT SIDE)

TUNER AGC ADJUSTMENT (RV101)

1. Align with an appropriate signal between stations.
2. Adjust (RV101 AGC VR) so that the snow noise and cross modulation just disappear from the picture.

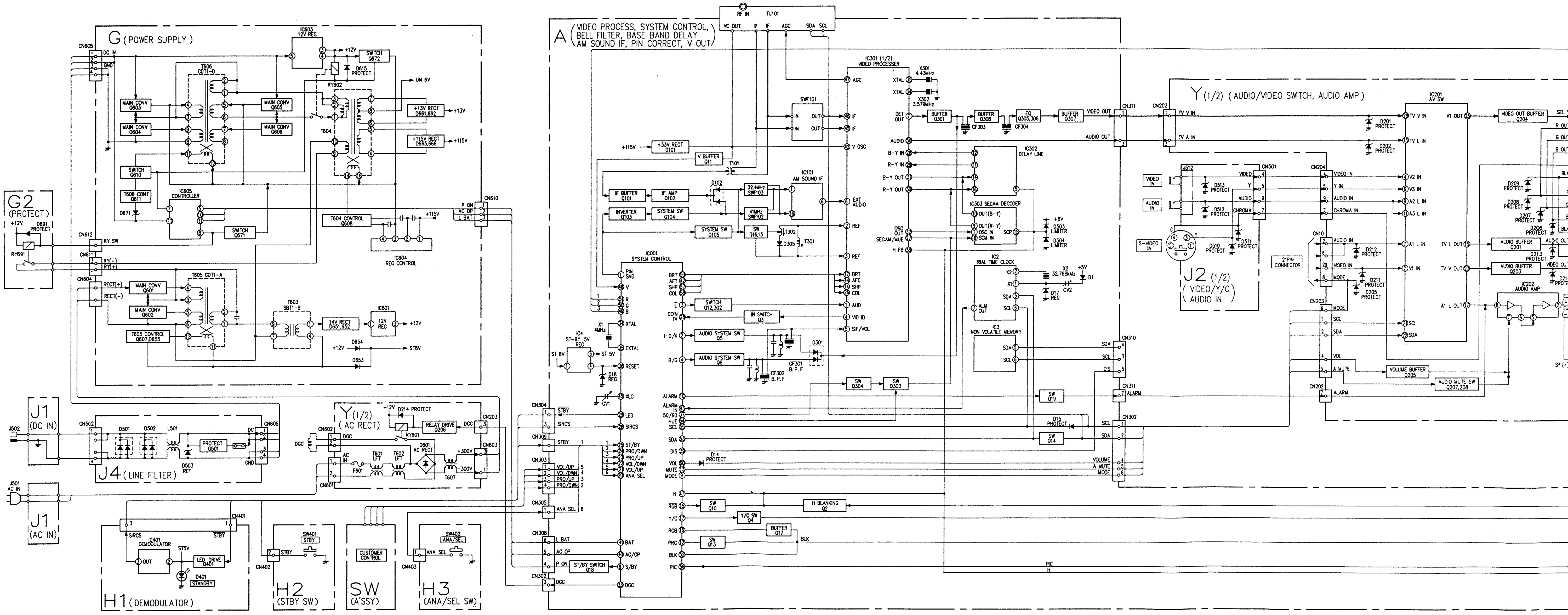
REAL TIME CLOCK ADJUSTMENT (CV2)

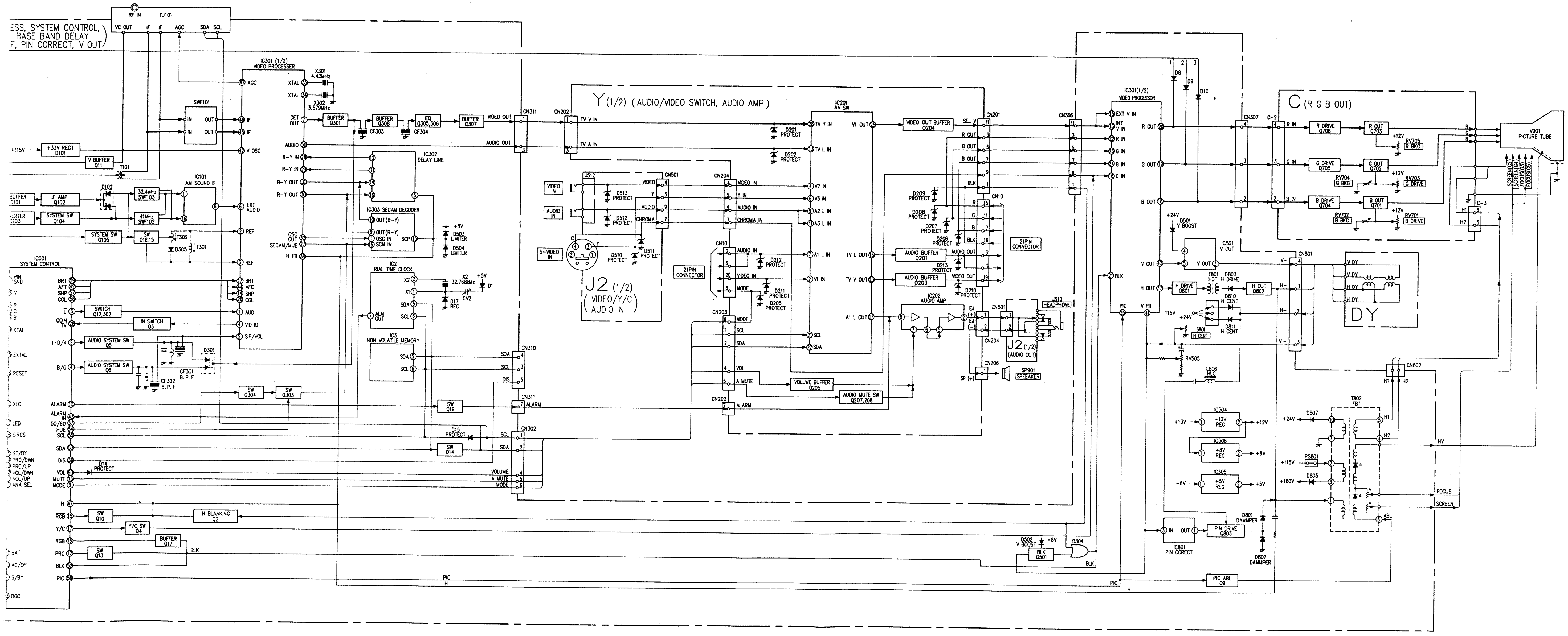
Equipment Required : Frequency Meter capable of measuring to an accuracy of 1Hz up to 35KHz.

1. Ensure that the set is disconnected from the AC and DC power source.
2. Connect the probe of the Frequency Meter to pin 2 of IC2.
3. Adjust CV2 for a meter reading of 32768Hz +/- 3Hz.

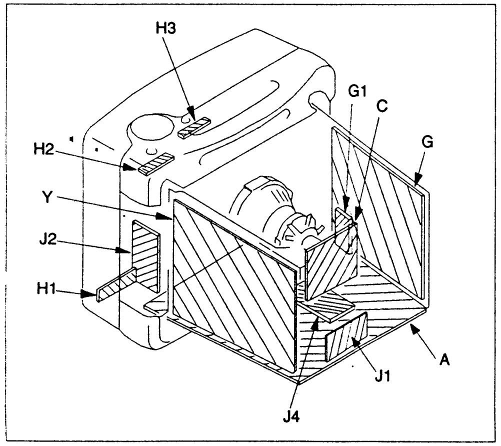
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM


G (POWER SUPPLY)
CN605
DC IN
GND
IC603 12V REG
+12V
SWITCH Q672
D615 PROTECT
RY602
UN 6V
T606 CDT1-D
MAIN CONV Q603
MAIN CONV Q604
MAIN CONV Q605
MAIN CONV Q606
T604
+13V RECT D661,662
+13V
+115V RECT D665,666
+115V
SWITCH Q610
T606 CONT Q611
D671
IC605 CONTROLLER
SWITCH Q671
T604 CONTROL Q608
IC604 REG CONTROL
CN610
P ON
AC OP
L BAT
G2 (PROTECT)
+12V
D691 PROTECT
RY691
CN612
RY SW
CN611
RY(−)
RY(+)
CN604
RECT(+)
RECT(−)
T605 CDT1-A
MAIN CONV Q601
MAIN CONV Q602
T605 CONTROL Q607,D655
T603 SBT1-B
14V RECT D651,652
IC601 12V REG
D654
D653
ST8V
J1 (DC IN)
J502
CN502
D501
D502
L501
PROTECT Q501
D503 REF
DC
GND
J4 (LINE FILTER)
J501 AC IN
J1 (AC IN)
Y (1/2) (AC RECT)
D214 PROTECT
RELAY DRIVE Q206
DGC
CN203
CN602
RY601
D601 AC RECT
AC IN
F601
T601 LFT
T602 LFT
+300V
−300V
T607
CN603
CN601
H1 (DEMODULATOR)
CN401
SIRCS
STBY
IC401 DEMODULATOR
OUT
ST5V
LED DRIVE Q401
D401 STANDBY
H2 (STBY SW)
CN402
SW401 STBY
SW (A'SSY)
CUSTOMER CONTROL
H3 (ANA/SEL SW)
CN403
SW402 ANA/SEL
ANA SEL
A (VIDEO PROCESS, SYSTEM CONTROL, BELL FILTER, BASE BAND DELAY AM SOUND IF, PIN CORRECT, V OUT)
TU101
RF IN
VC OUT
IF
AGC
SDA
SCL
SWF101
+115V
+33V RECT D101
V BUFFER Q11
T101
IC101 AM SOUND IF
D102
32.4MHz SWF103
41MHz SWF102
IF BUFFER Q101
IF AMP Q102
INVERTER Q103
SYSTEM SW Q104
SYSTEM SW Q105
SW Q16,15
T302
D305
T301
IC301 (1/2) VIDEO PROCESSER
X301 4.43MHz
X302 3.579MHz
XTAL
DET OUT
V OSC
EXT AUDIO
REF
BRT
AFC
SHP
COL
AUD
VID ID
SIF/VOL
AUDIO
B−Y IN
R−Y IN
B−Y OUT
R−Y OUT
OSC OUT
SECAM/MUE
H FB
BUFFER Q301
BUFFER Q308
CF303
EQ Q305,306
CF304
BUFFER Q307
VIDEO OUT
AUDIO OUT
CN311
IC302 DELAY LINE
IC303 SECAM DECODER
OUT(B−Y)
OUT(R−Y)
OSC IN
SCM IN
SCP
+8V
D503 LIMITER
D504 LIMITER
IC2 RIAL TIME CLOCK
X2 32.768kHz
+5V
D1
CV2
D17 REG
ALM OUT
IC3 NON VOLATILE MEMORY
IC001 SYSTEM CONTROL
PIN SND
R
G
B
XTAL
X1 4MHz
EXTAL
RESET
XLC
CV1
LED
SIRCS
ST/BY
PRO/DWN
PRO/UP
VOL/DWN
VOL/UP
ANA SEL
BAT
AC/OP
S/BY
DGC
AFT
COIN TV
I·D/K
B/G
ALARM
ALARM IN
50/60
HUE
DIS
VOL
MUTE
MODE
H
RGB
Y/C
PRC
BLK
PIC
IC4 ST-BY 5V REG
ST 8V
ST 5V
D18 REG
CN304
CN309
CN303
CN305
CN308
CN302
ST/BY SWITCH Q18
SWITCH Q12,302
IN SWITCH Q3
AUDIO SYSTEM SW Q5
AUDIO SYSTEM SW Q6
D301
CF301 B.P.F
CF302 B.P.F
SW Q304
SW Q303
SW Q19
D15 PROTECT
SW Q14
D14 PROTECT
SW Q10
H BLANKING Q2
Y/C SW Q4
BUFFER Q17
SW Q13
CN310
VOLUME
A MUTE
Y (1/2) (AUDIO/VIDEO SWITCH, AUDIO AMP)
CN202
TV V IN
TV A IN
D201 PROTECT
D202 PROTECT
IC201 AV SW
TV L IN
V1 OUT
VIDEO OUT BUFFER Q204
SEL
R OUT
G OUT
B OUT
J512
VIDEO IN
AUDIO IN
S-VIDEO IN
D513 PROTECT
D512 PROTECT
D510 PROTECT
D511 PROTECT
CN501
VIDEO
Y
CHROMA
J2 (1/2) (VIDEO/Y/C AUDIO IN)
CN204
Y IN
CHROMA IN
V2 IN
V3 IN
A2 L IN
A3 L IN
CN10
21PIN CONNECTOR
D212 PROTECT
D211 PROTECT
D205 PROTECT
A1 L IN
V1 IN
CN203
TV L OUT
TV V OUT
A1 L OUT
D209 PROTECT
D208 PROTECT
D207 PROTECT
D206 PROTECT
D213 PROTECT
AUDIO BUFFER Q201
AUDIO BUFFER Q203
IC202 AUDIO AMP
VOLUME BUFFER Q205
AUDIO MUTE SW Q207,208
SP (+)


ESS, SYSTEM CONTROL,
BASE BAND DELAY
F, PIN CORRECT, V OUT
RF IN
TU101
VC OUT
IF
AGC
SDA
SCL
IC301 (1/2)
VIDEO PROCESSOR
X301
4.43MHz
X302
3.579MHz
SWF101
+33V RECT
D101
V BUFFER
Q11
T101
IC101
AM SOUND IF
IF AMP
Q102
32.4MHz
SWF103
41MHz
SWF102
SYSTEM SW
Q104
SYSTEM SW
Q105
SW
Q16,15
T302
D305
T301
BUFFER
Q301
BUFFER
Q306
CF303
EQ
Q305,306
CF304
BUFFER
Q307
VIDEO OUT
AUDIO OUT
IC302
DELAY LINE
IC303 SECAM DECODER
D503
LIMITER
D504
LIMITER
IC001
SYSTEM CONTROL
SWITCH
Q12,302
IN SWITCH
Q3
AUDIO SYSTEM SW
Q5
AUDIO SYSTEM SW
Q6
D301
CF301
B.P.F
CF302
B.P.F
IC2
REAL TIME CLOCK
32.768kHz
D17
REG
IC3
NON VOLATILE MEMORY
SW
Q304
SW
Q303
SW
Q19
D15
PROTECT
SW
Q14
D14
PROTECT
SW
Q10
H BLANKING
Q2
Y/C SW
Q4
BUFFER
Q17
SW
Q13
CN311
CN310
CN302
CN202
Y (1/2) (AUDIO/VIDEO SWITCH, AUDIO AMP)
IC201
AV SW
D201
PROTECT
D202
PROTECT
J512
VIDEO IN
AUDIO IN
S-VIDEO IN
D513
PROTECT
D512
PROTECT
D510
PROTECT
D511
PROTECT
J2 (1/2)
(VIDEO/Y/C
AUDIO IN)
CN501
CN204
CN10
CN203
D212
PROTECT
D211
PROTECT
D205
PROTECT
21PIN
CONNECTOR
VOLUME BUFFER
Q205
AUDIO MUTE SW
Q207,208
VIDEO OUT BUFFER
Q204
AUDIO BUFFER
Q201
AUDIO BUFFER
Q203
D209
PROTECT
D208
PROTECT
D207
PROTECT
D206
PROTECT
D213
PROTECT
D210
PROTECT
IC202
AUDIO AMP
CN201
CN501
J510
HEADPHONE
J2 (1/2)
(AUDIO OUT)
CN206
SP901
SPEAKER
CN306
IC301(1/2)
VIDEO PROCESSOR
D8
D9
D10
D501
V BOOST
IC501
V OUT
T801
HDT
H DRIVE
Q801
D803
H DRIVE
D810
H CENT
D811
H CENT
S801
H CENT
RV505
L806
HLC
IC304
+12V
REG
IC306
+8V
REG
IC305
+5V
REG
D807
PS801
D805
IC801
PIN CORECT
PIN DRIVE
Q803
D801
DAMPER
D802
DAMPER
D502
V BOOST
BLK
Q501
D304
PIC ABL
Q9
CN307
C-2
C (R G B OUT)
R DRIVE
Q706
R OUT
Q703
RV705
R BKG
G DRIVE
Q705
G OUT
Q702
RV704
G BKG
RV703
G DRIVE
B DRIVE
Q704
B OUT
Q701
RV702
B BKG
RV701
B DRIVE
V901
PICTURE TUBE
C-3
CN801
H OUT
Q802
DY
CN802
T802
FBT
HV
FOCUS
SCREEN
ABL

5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS - Conductor Side -

Note :

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  kΩ = 1000Ω , MΩ = 1000KΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power 1/10W

- : nonflammable resistor.
- : fusible resistor.
- △ : internal component.
- ▭ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V (volts).
- Readings are taken with a 10MΩ digital multimeter.
- Readings are taken with a PAL color-bar signal input.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with part number specified.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- Circled numbers are waveform references
- ━━━ : B+ bus.
- ━ ━ ━ : B- bus.
- ░░░ : signal path.

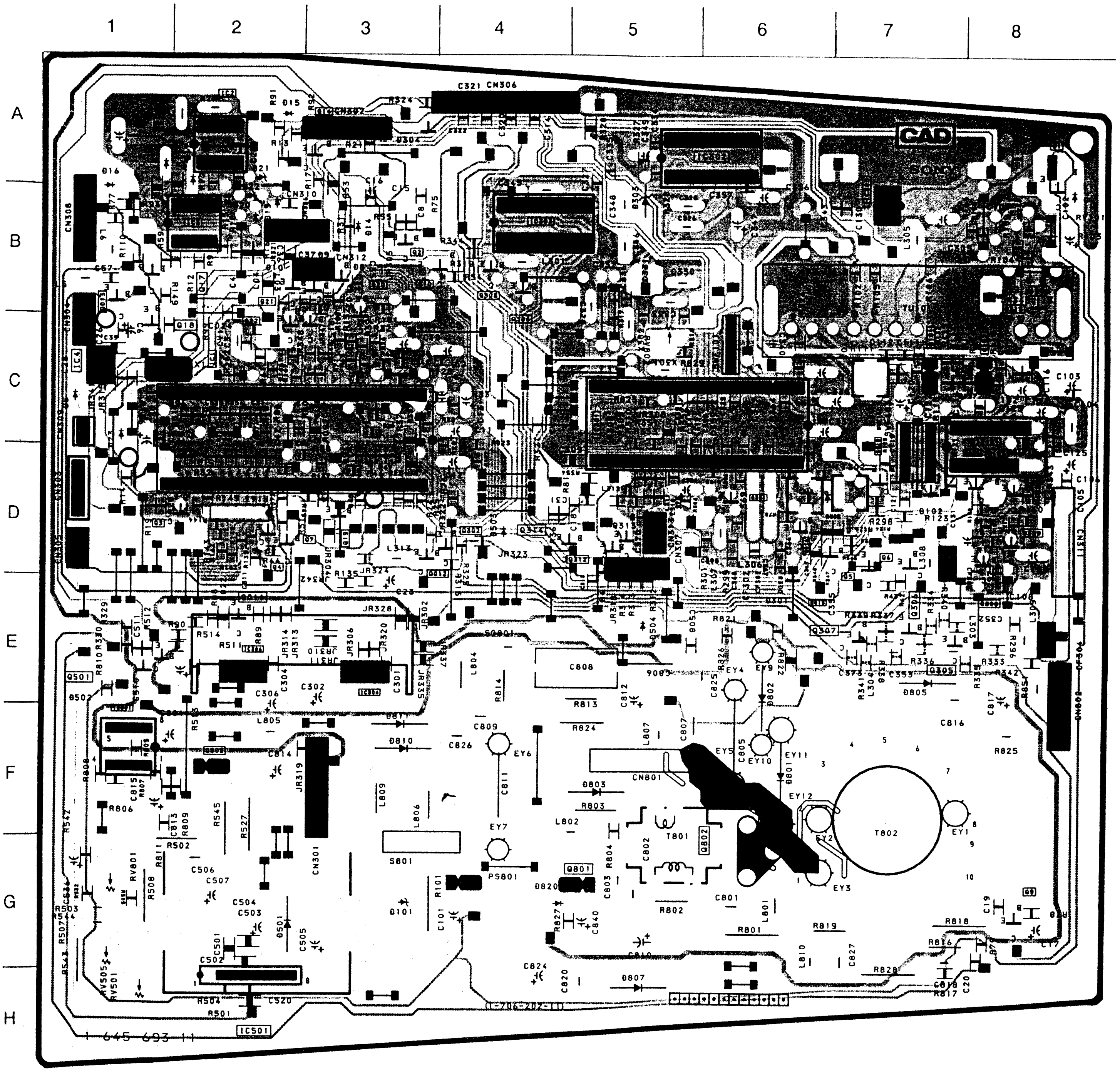
IC			
IC001	C - 2	Q309	D - 8
IC2	A - 2	Q312	D - 5
IC3	B - 2	Q313	D - 5
IC4	C - 1	Q314	D - 4
IC101	C - 8	Q315	B - 8
IC301	C - 5	Q501	E - 1
IC302	A - 6	Q801	G - 5
IC303	B - 4	Q802	G - 6
IC304	E - 3	Q803	F - 2
IC305	B - 7		
IC306	E - 2		
IC501	H - 2		
IC801	F - 1		
TRANSISTOR		DIODE	
Q2	B - 3	D1	A - 1
Q3	D - 1	D4	B - 8
Q4	D - 2	D5	C - 1
Q5	D - 7	D8	B - 3
Q6	D - 7	D9	B - 3
Q7	D - 3	D10	B - 2
Q9	G - 8	D14	B - 3
Q10	B - 3	D15	A - 2
Q11	E - 2	D16	A - 1
Q12	D - 3	D17	A - 2
Q13	B - 1	D19	B - 2
Q14	A - 3	D20	B - 2
Q15	E - 6	D21	A - 2
Q16	D - 6	D22	A - 2
Q17	B - 2	D23	C - 1
Q18	C - 2	D101	G - 3
Q19	D - 3	D102	D - 7
Q20	B - 3	D301	E - 6
Q21	B - 2	D303	B - 5
Q22	C - 2	D304	A - 3
Q101	C - 7	D305	D - 6
Q102	C - 8	D501	G - 2
Q103	D - 8	D502	E - 1
Q104	D - 8	D503	D - 4
Q105	C - 7	D504	E - 5
Q301	D - 6	D801	F - 6
Q302	D - 4	D802	E - 6
Q303	B - 4	D803	F - 5
Q304	C - 4	D805	E - 7
Q305	E - 7	D807	H - 5
Q306	E - 7	D810	F - 3
Q307	E - 6	D811	F - 3
Q308	E - 8	D820	G - 4

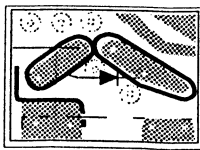
A

TUNER, FM/AM SOUND IF VIDEO PROCESS, MEMORY SYSTEM CONTROL, H/V OUT

— A Board —

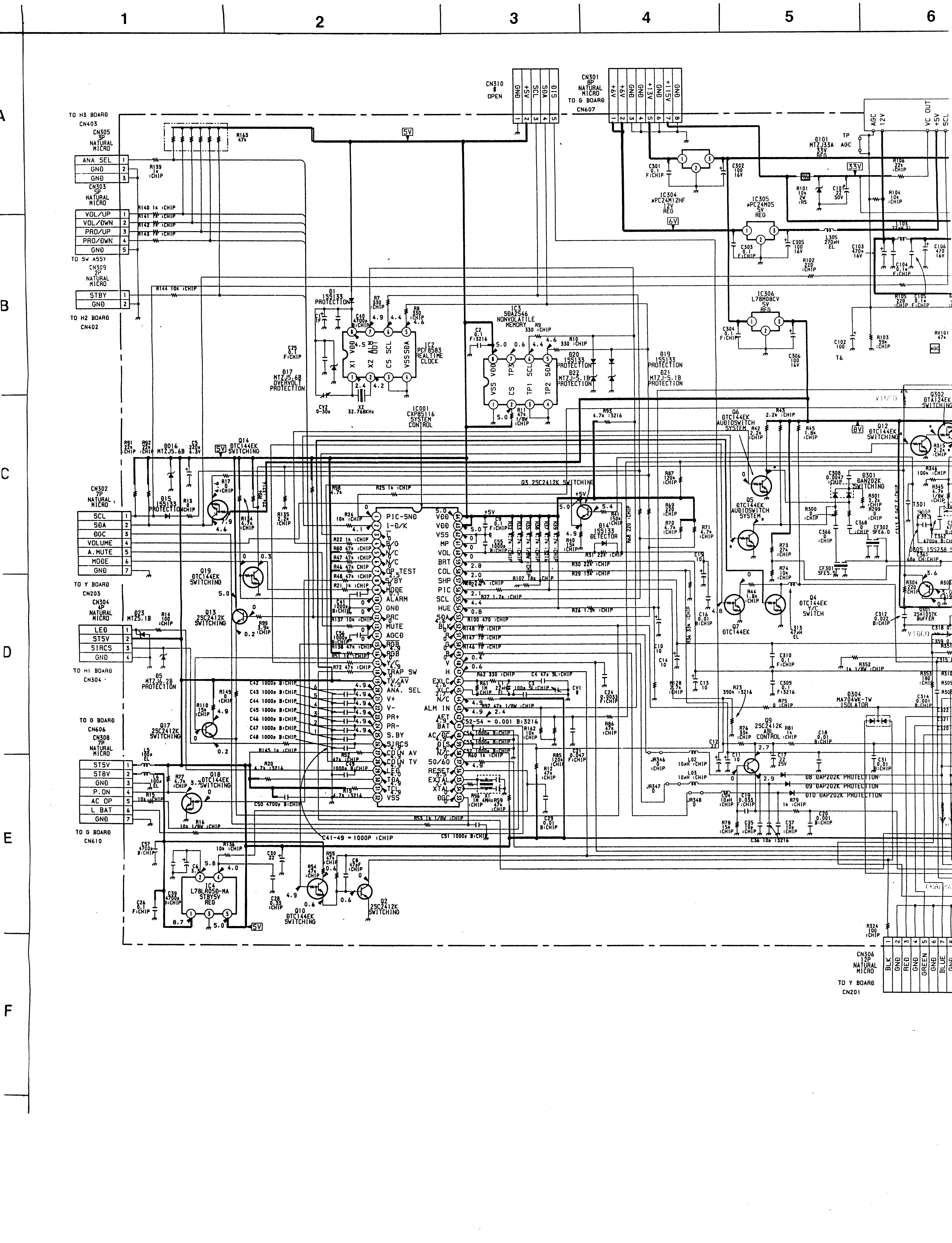
- : Pattern from the viewed side.
- ▨ : Pattern of the rear side.

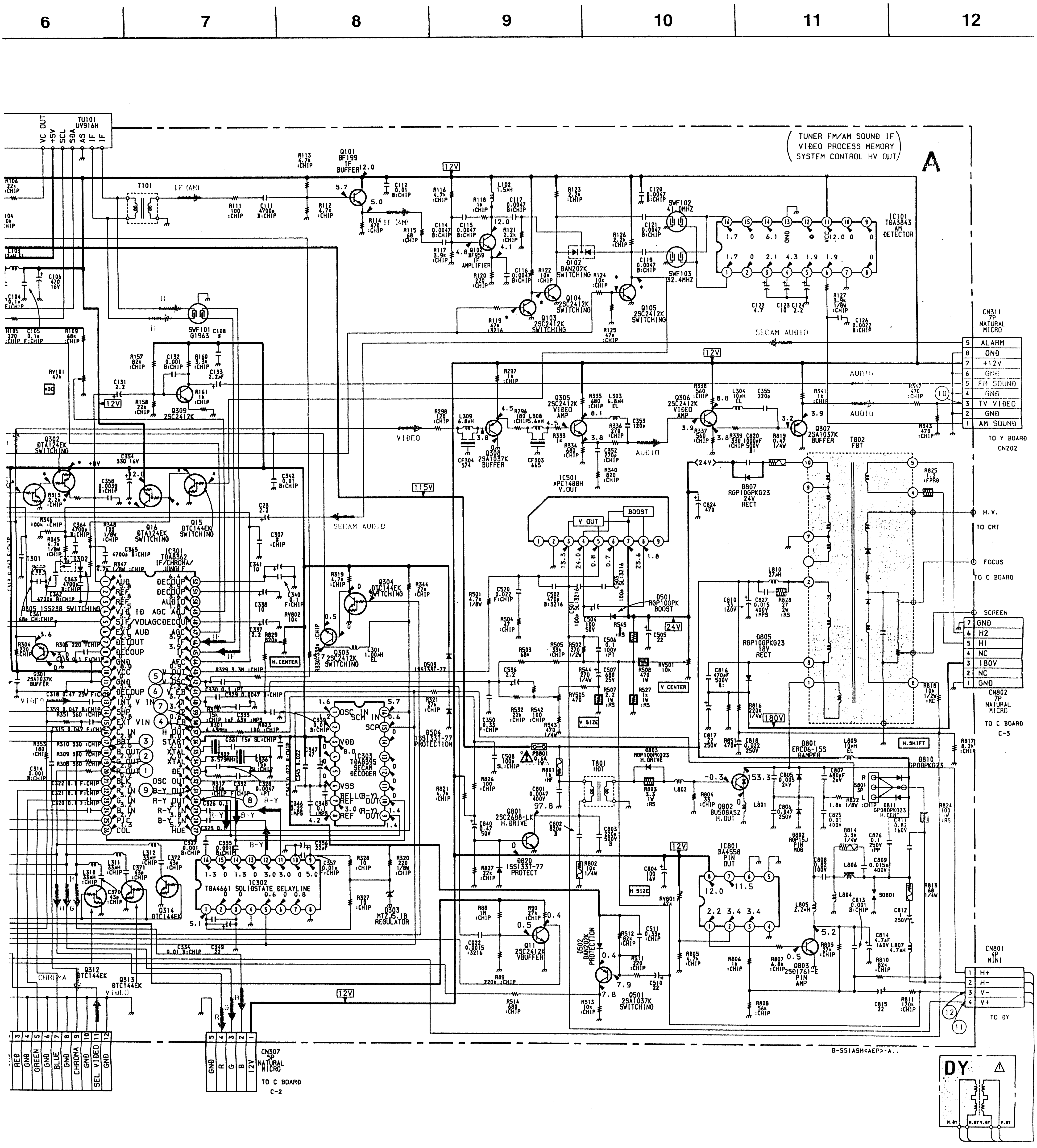

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
CAD
SONY
T802
T801
CN301
CN801
1-645-693-11
1-706-207-11



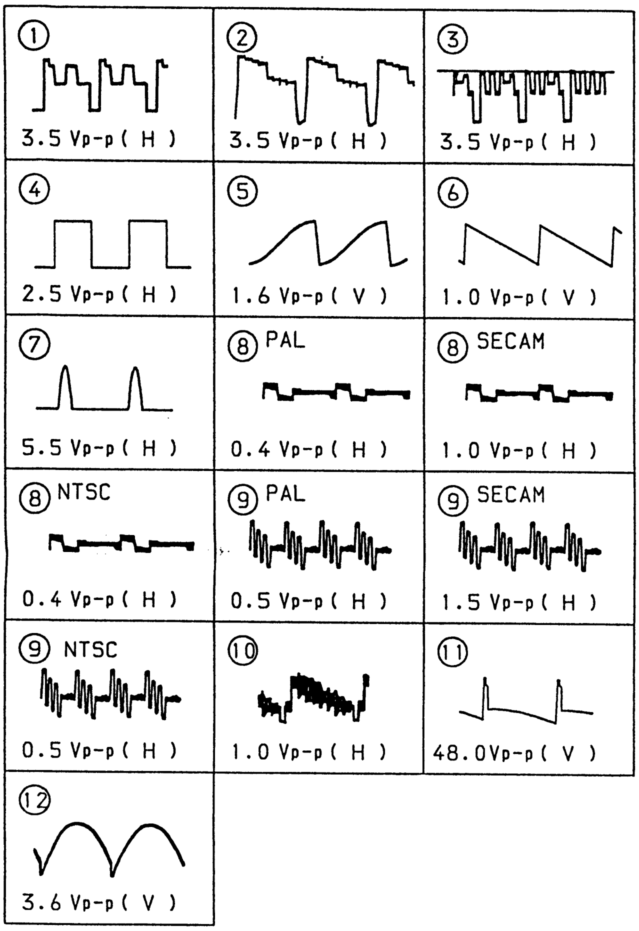
NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock during inspection or repair.

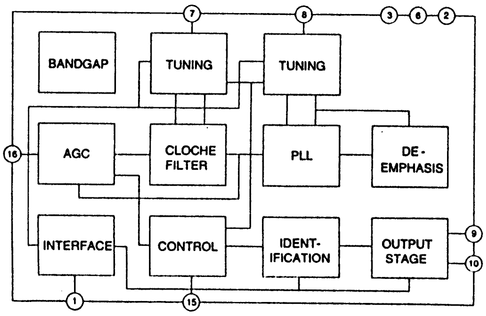

1
2
3
4
5
6
A
B
C
D
E
F
TO H3 BOARD CN403
CN305 3P NATURAL MICRO
ANA SEL
GND
CN303 5P NATURAL MICRO
VOL/UP
VOL/DWN
PRO/UP
PRO/DWN
TO SW ASSY
CN309 2P NATURAL MICRO
STBY
TO H2 BOARD CN402
CN310 5 OPEN
GND
+5V
SCL
SDA
DIS
CN301 8P NATURAL MICRO TO G BOARD CN607
+9V
+6V
+13V
+115V
IC304 μPC24M12HF 12V REG
IC305 μPC24M05 5V REG
IC306 L78M08CV 8V REG
D101 MTZJ33A 33V REG
IC2 PCF8583 REALTIME CLOCK
IC3 SDA2546 NONVOLATILE MEMORY
IC001 CXP85116 SYSTEM CONTROL
D1 1SS133 PROTECTION
D17 MTZJ5.6B OVERVOLT PROTECTION
D20 1SS133 PROTECTION
D22 MTZJ-5.1B PROTECTION
D19 1SS133 PROTECTION
D21 MTZJ-5.1B PROTECTION
X2 32.768KHz
Q14 DTC144EK SWITCHING
D15 1SS133 PROTECTION
Q19 DTC144EK SWITCHING
Q13 2SC2412K SWITCHING
Q3 2SC2412K SWITCHING
D14 1SS133 DETECTOR
Q6 DTC144EK AUDIOSWITCH SYSTEM
Q5 DTC144EK AUDIOSWITCH SYSTEM
Q7 DTC144EK
Q4 DTC144EK Y/C SWITCH
Q12 DTC144EK SWITCHING
Q302 DTA124EK SWITCHING
D301 DAN202K SWITCHING
D304 MA704WK-TW ISOLATOR
Q9 2SC2412K ABL CONTROL
D8 DAP202K PROTECTION
D9 DAP202K PROTECTION
D10 DAP202K PROTECTION
CN302 7P NATURAL MICRO
SCL
SDA
DGC
VOLUME
A.MUTE
MODE
GND
TO Y BOARD CN203
CN304 4P NATURAL MICRO
LED
ST5V
SIRCS
GND
TO H1 BOARD CN304
D23 MTZ5.1B
D5 MTZJ6.2B PROTECTION
TO G BOARD CN606
CN308 7P NATURAL MICRO
ST5V
ST8V
GND
P.ON
AC OP
L BAT
GND
TO G BOARD CN610
Q17 2SC2412K SWITCHING
Q18 DTC144EK SWITCHING
IC4 L78LR05D-MA STBY5V REG
Q10 DTC144EK SWITCHING
Q2 2SC2412K SWITCHING
C41-49 = 1000P :CHIP
C52-54 = 0.001 B:3216
PIC-SND
I-D/K
B/G
N/C
OP TEST
S/BY
MODE
ALARM
GND
PRC
MUTE
AGCD
RGB
Y/C
TRAP SW
TV/AV
ANA. SEL
V+
V-
PR+
PR-
S.BY
SIRCS
CDIN AV
CDIN TV
LED
TDA
TCL
VSS
VDD
MP
VOL
BRT
COL
SHP
PIC
SCL
HUE
SDA
BLK
EXLC
XLC
ALM IN
AFT
BAT
AC DC
DIS
N/C
50/60
RESET
EXTAL
XTAL
DGC
CN306 12P NATURAL MICRO TO Y BOARD CN201
BLK
GND
RED
GND
GREEN
GND
BLUE
AGC 12V
VC OUT
+5V
SCL
TP AGC
5V
6V
8V
33V


6
7
8
9
10
11
12
TUNER FM/AM SOUND IF
VIDEO PROCESS MEMORY
SYSTEM CONTROL HV OUT
A
TU101 UV916H
VC OUT
+5V
SCL
SDA
AS
IF
IF
T101
IF (AM)
Q101 BF199 IF BUFFER
Q102 BF959 IF AMPLIFIER
Q102 DAN202K SWITCHING
Q103 2SC2412K SWITCHING
Q104 2SC2412K SWITCHING
Q105 2SC2412K SWITCHING
SWF101 G1963
SWF102 41.0MHZ
SWF103 32.4MHZ
IC101 TDA3843 AM DETECTOR
SECAM AUDIO
12V
115V
24V
CN311 7P NATURAL MICRO
ALARM
GND
+12V
GND
FM SOUND
GND
TV VIDEO
GND
AM SOUND
TO Y BOARD CN202
VIDEO
AUDIO
Q305 2SC2412K VIDEO AMP
Q306 2SC2412K VIDEO AMP
Q307 2SA1037K BUFFER
Q308 2SA1037K BUFFER
Q309 2SC2412K
IC501 μPC1488H V.OUT
V OUT
BOOST
D501 RGP10GPK BOOST
D807 RGP10GPKG23 24V RECT
D805 RGP10GPKG23 18V RECT
T802 FBT
H.V.
TO CRT
FOCUS
TO C BOARD
SCREEN
CN802 7P NATURAL MICRO
GND
H2
H1
NC
180V
NC
GND
TO C BOARD C-3
Q302 DTA124EK SWITCHING
Q16 DTA124EK SWITCHING
Q15 DTC144EK SWITCHING
IC301 TDA8362 IF/CHROMA/JUNGLE
Q304 DTC144EK SWITCHING
Q303 2SC2412K SWITCHING
Q301 2SA1037K BUFFER
D503 1SS133T-77
D504 1SS133T-77 PROTECTION
IC303 TDA8395 SECAM DECODER
IC302 TDA4661 SOLIDSTATE DELAYLINE
D303 MTZJ5.1B REGULATOR
Q314 DTC144EK
Q312 DTC144EK
Q313 DTC144EK
H.CENTER
V CENTER
V SIZE
H SIZE
H.SHIFT
180V
Q801 2SC2688-LK H.DRIVE
T801 HDT
D803 RGP10GPKG23 H.DRIVE
Q802 BU508AS2 H.OUT
D801 ERC06-15S DAMPER
D810 GP08DPKG23
D811 GP08DPKG23 H.CENT
D820 1SS133T-77 PROTECT
PS801 0.6A
IC801 BA4558 PIN OUT
D802 RGP15J PIN MOD
Q803 2SD1761-E PIN AMP
Q11 2SC2412K VBUFFER
D502 DAN202K PROTECTION
Q501 2SA1037K SWITCHING
CN801 4P MINI
H+
H-
V-
V+
TO DY
DY
CHROMA
VIDEO
RED
GND
GREEN
GND
BLUE
GND
CHROMA
GND
SEL VIDEO
GND
CN307 5P NATURAL MICRO
GND
R
G
B
12V
TO C BOARD C-2
B-SS1ASM<AEP>-A..

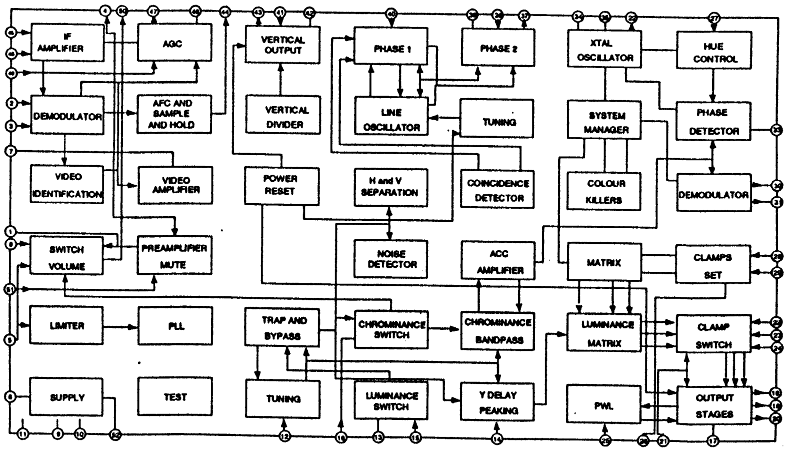
WAVEFORMS A BOARD



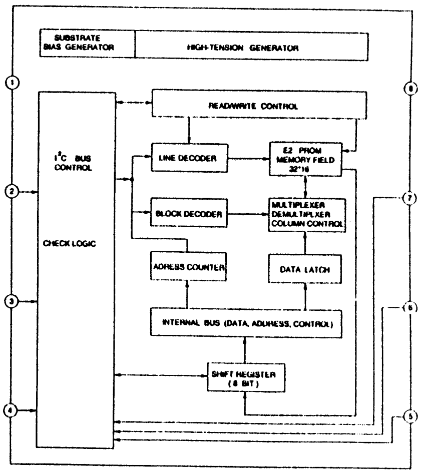
A BOARD IC303 TDA8395-N1


BANDGAP
TUNING
TUNING
AGC
CLOCHE FILTER
PLL
DE-EMPHASIS
INTERFACE
CONTROL
IDENT-IFICATION
OUTPUT STAGE
⑦
⑧
③
⑥
②
⑯
⑨
⑩
①
⑮

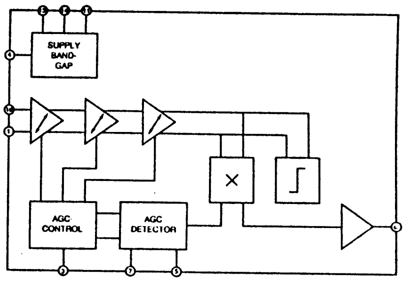
A BOARD IC301 TDA8362-N3


IF AMPLIFIER
AGC
VERTICAL OUTPUT
PHASE 1
PHASE 2
XTAL OSCILLATOR
HUE CONTROL
DEMODULATOR
AFC AND SAMPLE AND HOLD
VERTICAL DIVIDER
LINE OSCILLATOR
TUNING
SYSTEM MANAGER
PHASE DETECTOR
VIDEO IDENTIFICATION
VIDEO AMPLIFIER
POWER RESET
H and V SEPARATION
COINCIDENCE DETECTOR
COLOUR KILLERS
DEMODULATOR
SWITCH VOLUME
PREAMPLIFIER MUTE
NOISE DETECTOR
ACC AMPLIFIER
MATRIX
CLAMPS SET
LIMITER
PLL
TRAP AND BYPASS
CHROMINANCE SWITCH
CHROMINANCE BANDPASS
LUMINANCE MATRIX
CLAMP SWITCH
SUPPLY
TEST
TUNING
LUMINANCE SWITCH
Y DELAY PEAKING
PWL
OUTPUT STAGES
4
47
44
43
41
40
37
27
2
3
7
1
5
6
11
9
10
12
13
14
17
21

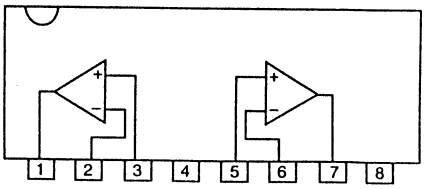
A BOARD IC3 SDA 2546

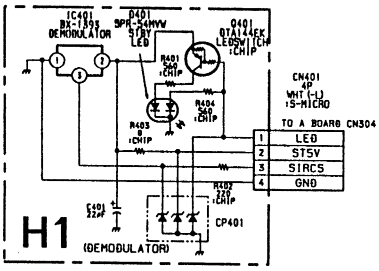

SUBSTRATE BIAS GENERATOR
HIGH-TENSION GENERATOR
READ/WRITE CONTROL
I²C BUS CONTROL
CHECK LOGIC
LINE DECODER
E2 PROM MEMORY FIELD 32*16
BLOCK DECODER
MULTIPLEXER DEMULTIPLXER COLUMN CONTROL
ADRESS COUNTER
DATA LATCH
INTERNAL BUS (DATA, ADDRESS, CONTROL)
SHIFT REGISTER (8 BIT)
①
②
③
④
⑤
⑥
⑦
⑧

A BOARD IC101 TDA3843-V3


SUPPLY BAND-GAP
AGC CONTROL
AGC DETECTOR
×

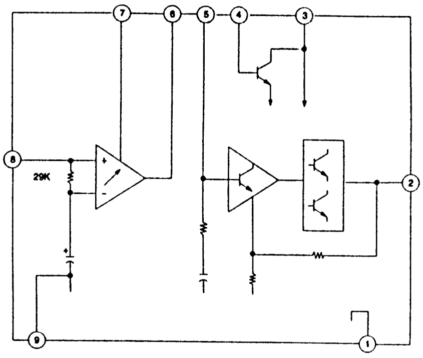
A BOARD IC801 RC4558P

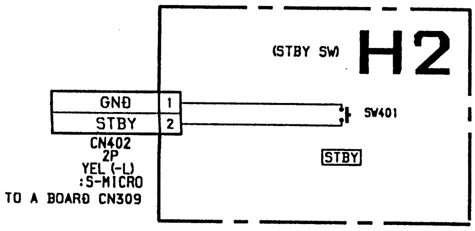



IC401
BX-1393
DEMODULATOR
D401
SPR-54MVW
STBY
LED
Q401
DTA144EK
LEDSWITCH
:CHIP
R401
560
:CHIP
R404
560
:CHIP
R403
0
:CHIP
CN401
4P
WHT (-L)
:S-MICRO
TO A BOARD CN304
1 LED
2 ST5V
3 SIRCS
4 GND
R402
220
:CHIP
C401
22μF
CP401
H1
(DEMODULATOR)

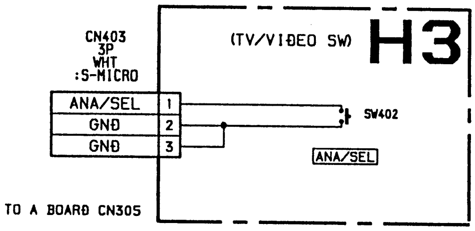
B-SS1ASM<AEP>-H1.

Y BOARD IC202 TDA1013B


7
6
5
4
3
8
29K
2
9
1

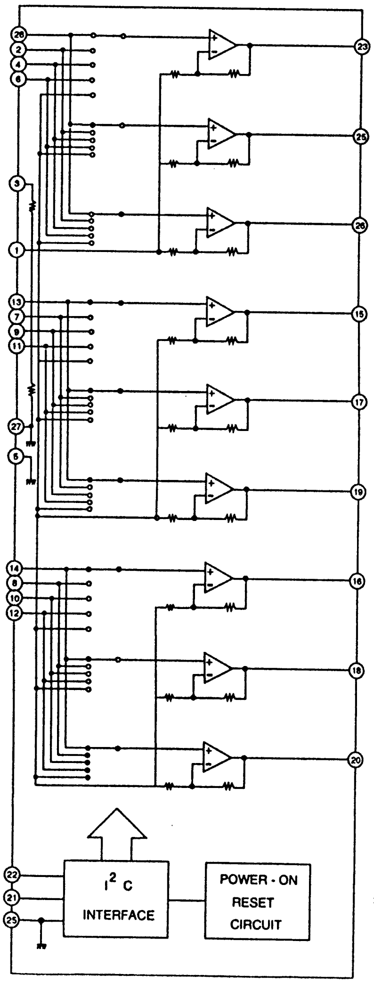

(STBY SW)
H2
GND 1
STBY 2
SW401
STBY
CN402
2P
YEL (-L)
:S-MICRO
TO A BOARD CN309

B-SS1ASM<AEP>-H2.

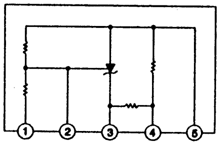

CN403
3P
WHT
:S-MICRO
(TV/VIDEO SW)
H3
ANA/SEL 1
GND 2
GND 3
SW402
ANA/SEL
TO A BOARD CN305

B-SS1ASM<AEP>-H3.

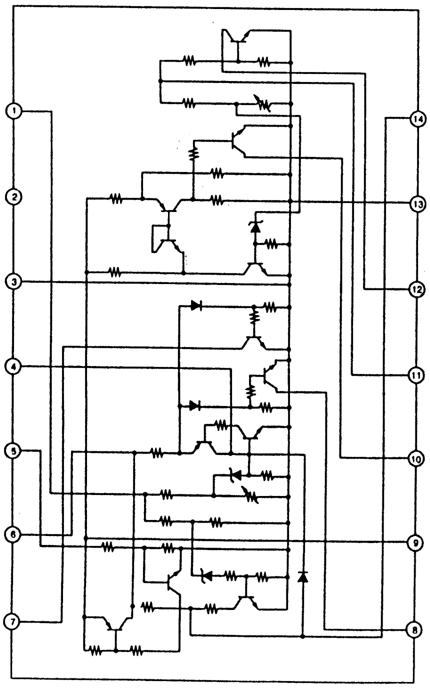
Y BOARD IC201 CXA1114P

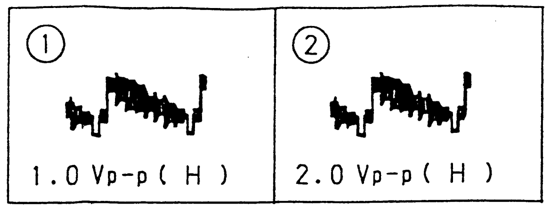

28
2
4
6
3
1
13
7
9
11
27
5
14
8
10
12
23
25
26
15
17
19
16
18
20
22
21
25
I² C
INTERFACE
POWER - ON
RESET
CIRCUIT

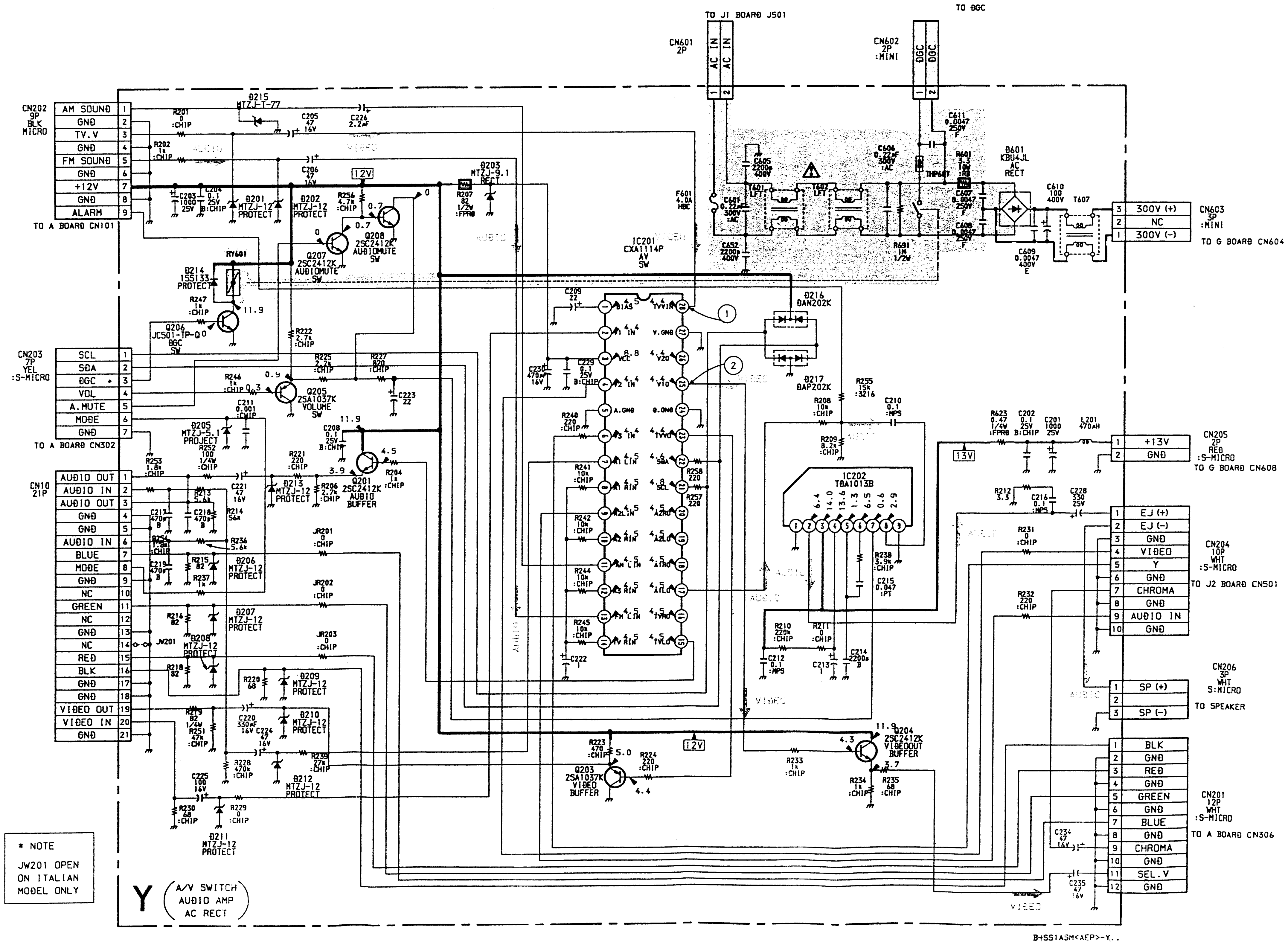
G BOARD IC604 DM-46



G BOARD IC605 DM-45


1
2
3
4
5
6
7
14
13
12
11
10
9
8

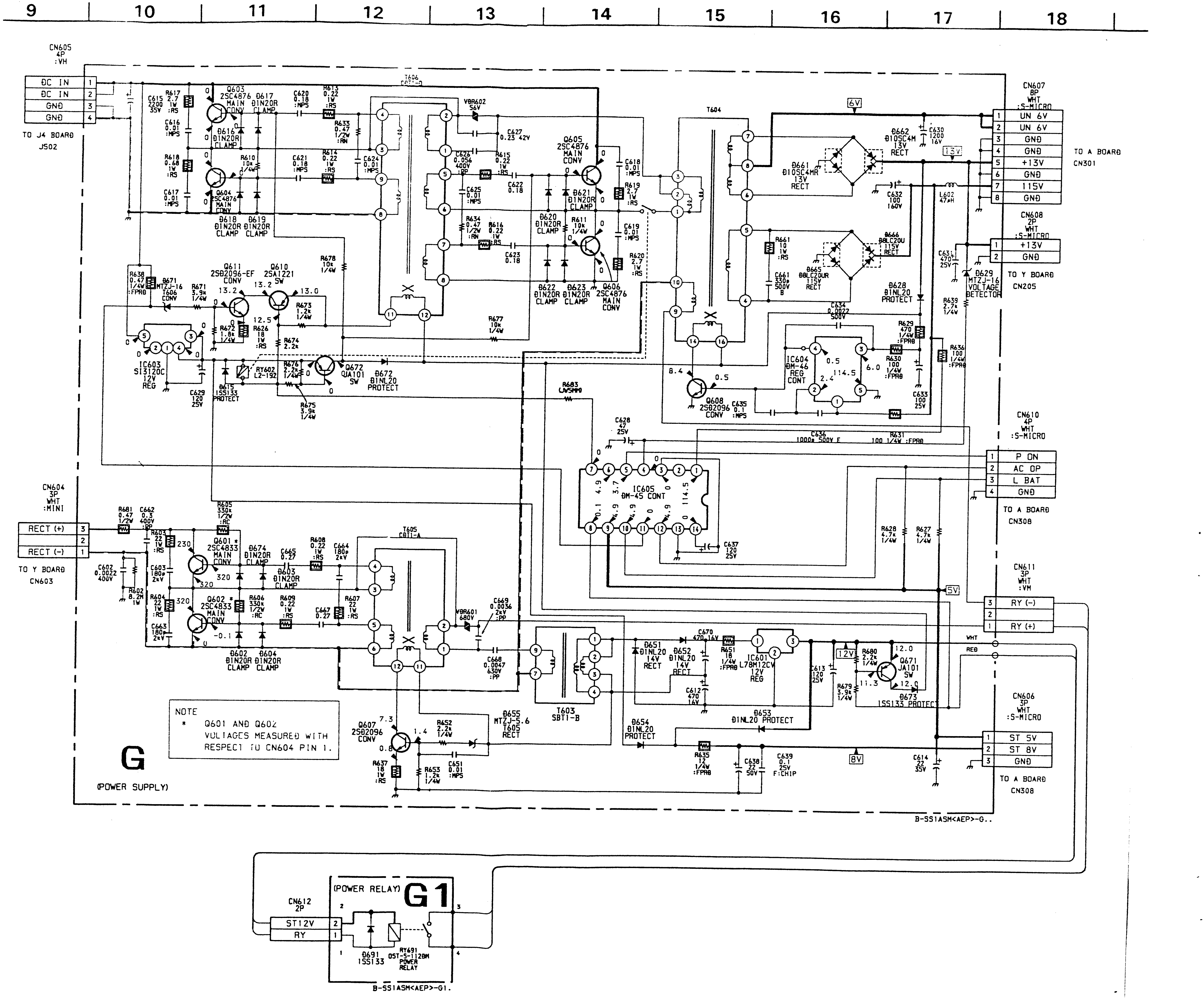



TO J1 BOARD J501
TO DGC
CN601 2P
AC IN
AC IN
CN602 2P :MINI
DGC
DGC
CN202 9P BLK MICRO
AM SOUND
GND
TV.V
GND
FM SOUND
GND
+12V
GND
ALARM
TO A BOARD CN101
D215 MTZJ-T-77
R201 0 :CHIP
C205 47 16V
C226 2.2μF
R202 1k :CHIP
C206 47 16V
12V
D203 MTZJ-9.1 RECT
R207 82 1/2V :FPRD
C203 1000 25V
C204 0.1 25V B:CHIP
D201 MTZJ-12 PROTECT
D202 MTZJ-12 PROTECT
R256 4.7k :CHIP
Q208 2SC2412K AUDIOMUTE SW
Q207 2SC2412K AUDIOMUTE SW
RY601
D214 1SS133 PROTECT
R247 1k :CHIP
Q206 JCS01-TP-Q DGC SW
R222 2.7k :CHIP
CN203 7P YEL :S-MICRO
SCL
SDA
DGC
VOL
A.MUTE
MODE
GND
TO A BOARD CN302
R225 2.2k :CHIP
R227 820 :CHIP
R246 1k :CHIP
Q205 2SA1037K VOLUME SW
C223 22
C211 0.001 :CHIP
D205 MTZJ-5.1 PROJECT
R252 100 1/4W :CHIP
C208 0.1 25V B:CHIP
R253 1.8k :CHIP
R221 220 :CHIP
Q201 2SC2412K AUDIO BUFFER
R204 1k :CHIP
CN10 21P
AUDIO OUT
AUDIO IN
AUDIO OUT
GND
GND
AUDIO IN
BLUE
MODE
GND
NC
GREEN
NC
GND
NC
RED
BLK
GND
GND
VIDEO OUT
VIDEO IN
GND
C221 47 16V
D213 MTZJ-12 PROTECT
R206 2.7k :CHIP
R213 5.6k
R214 56k
C217 470P B
C218 470P B
R254 1.8k :CHIP
R236 5.6k
R215 82
R237 1k
C219 470P B
D206 MTZJ-12 PROTECT
JR201 0 :CHIP
JR202 0 :CHIP
JR203 0 :CHIP
R216 82
D207 MTZJ-12 PROTECT
JW201
D208 MTZJ-12 PROTECT
R218 82
R220 68
D209 MTZJ-12 PROTECT
R219 82 1/4W
R251 47k :CHIP
C220 330μF 16V
C224 47 16V
D210 MTZJ-12 PROTECT
R228 470k :CHIP
R239 27k :CHIP
D212 MTZJ-12 PROTECT
C225 100 16V
R230 68 :CHIP
R229 0 :CHIP
D211 MTZJ-12 PROTECT
Y
A/V SWITCH
AUDIO AMP
AC RECT
IC201 CXA1114P AV SW
C209 22
C230 470μF 16V
C229 0.1 25V B:CHIP
R240 220 :CHIP
R241 10k :CHIP
R242 10k :CHIP
R244 10k :CHIP
R245 10k :CHIP
C222 1
BIAS
V1 IN
VCC
V2 IN
A.GND
V3 IN
A1 LIN
A1 RIN
A2 LIN
A2 RIN
A3 LIN
A3 RIN
FN LIN
FN RIN
TVVIN
V.GND
V20
V10
D.GND
TVVO
SDA
SCL
A2RO
A2LO
A1RO
A1LO
TVRO
TVLO
R258 220
R257 220
F601 4.0A HBC
C601 0.22μF 300V :AC
C605 2200P 400V
C604 0.22μF 300V :AC
C652 2200P 400V
LF601
LF602
THP601
R601 3.3 10W :RB
C611 0.0047 250V F
C607 0.0047 250V F
C608 0.0047 250V F
R691 1M 1/2V
D601 KBU4JL AC RECT
C610 100 400V
T607
C609 0.0047 400V E
CN603 3P :MINI
300V (+)
NC
300V (-)
TO G BOARD CN604
D216 DAN202K
D217 DAP202K
R255 15k :3216
R208 10k :CHIP
C210 0.1 :NPS
R209 8.2k :CHIP
IC202 TDA1013B
R623 0.47 1/4W :FPRD
C202 0.1 25V B:CHIP
C201 1000 25V
L201 470μH
13V
CN205 2P RED :S-MICRO
+13V
GND
TO G BOARD CN608
R212 3.3
C216 0.1 :NPS
C228 330 25V
R231 0 :CHIP
R238 3.9k :CHIP
C215 0.047 :PT
CN204 10P WHT :S-MICRO
EJ (+)
EJ (-)
GND
VIDEO
Y
GND
CHROMA
GND
AUDIO IN
GND
TO J2 BOARD CN501
R232 220 :CHIP
R210 220k :CHIP
R211 0 :CHIP
C212 0.1 :NPS
C213 1
C214 2200P B
CN206 3P WHT S:MICRO
SP (+)
SP (-)
TO SPEAKER
Q204 2SC2412K VIDEOOUT BUFFER
R223 470 :CHIP
R224 220 :CHIP
Q203 2SA1037K VIDEO BUFFER
R233 1k :CHIP
R234 1k :CHIP
R235 68 :CHIP
CN201 12P WHT :S-MICRO
BLK
GND
RED
GND
GREEN
GND
BLUE
GND
CHROMA
GND
SEL.V
GND
TO A BOARD CN306
C234 47 16V
C235 47 16V

* NOTE

JW201 OPEN
ON ITALIAN
MODEL ONLY

B+SS1ASM<AEP>-Y,..

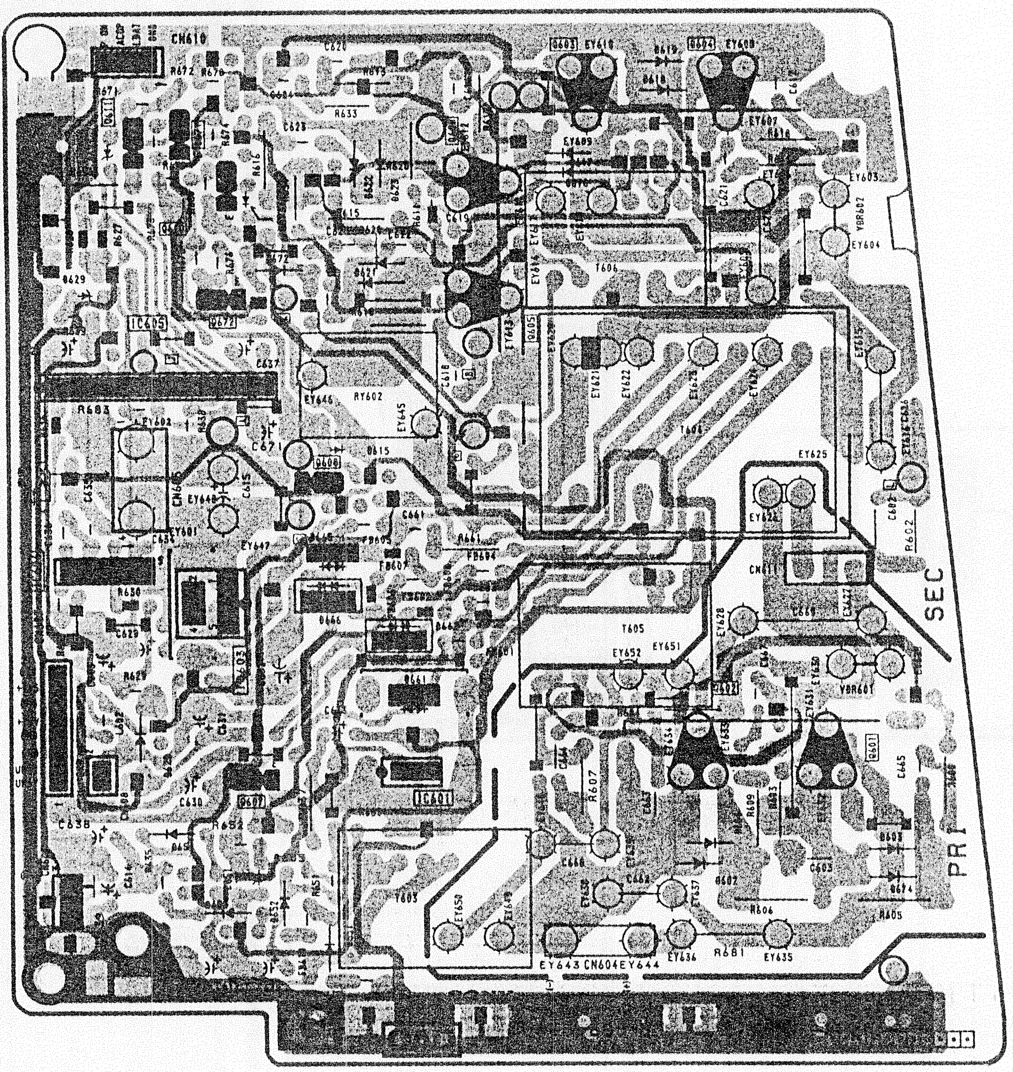

9
10
11
12
13
14
15
16
17
18
CN605 4P :VH
DC IN
DC IN
GND
GND
TO J4 BOARD J502
Q603 2SC4876 MAIN CONV
Q604 2SC4876 MAIN CONV
D616 D1N20R CLAMP
D617 D1N20R CLAMP
D618 D1N20R CLAMP
D619 D1N20R CLAMP
T606
VDR602 56V
Q605 2SC4876 MAIN CONV
Q606 2SC4876 MAIN CONV
D620 D1N20R CLAMP
D621 D1N20R CLAMP
D622 D1N20R CLAMP
D623 D1N20R CLAMP
T604
D661 D10SC4MR 13V RECT
D662 D10SC4M 13V RECT
D665 D8LC20UR 115V RECT
D666 D8LC20U 115V RECT
L602 47μH
6V
13V
CN607 8P WHT :S-MICRO
UN 6V
UN 6V
GND
GND
+13V
GND
115V
GND
TO A BOARD CN301
CN608 2P WHT :S-MICRO
+13V
GND
TO Y BOARD CN205
D629 MTZJ-16 VOLTAGE DETECTOR
D628 D1NL20 PROTECT
Q611 2SD2096-EF CONV
Q610 2SA1221 SW
D671 MTZJ-16 T606 CONV
IC603 SI3120C 12V REG
RY602 L2-192
D615 1SS133 PROTECT
Q672 JA101 SW
D672 D1NL20 PROTECT
IC604 DM-46 REG CONT
Q608 2SD2096 CONV
IC605 DM-45 CONT
CN610 4P WHT :S-MICRO
P ON
AC DP
L BAT
GND
TO A BOARD CN308
CN604 3P WHT :MINI
RECT (+)
RECT (-)
TO Y BOARD CN603
Q601 * 2SC4833 MAIN CONV
Q602 * 2SC4833 MAIN CONV
D674 D1N20R CLAMP
D603 D1N20R CLAMP
D602 D1N20R CLAMP
D604 D1N20R CLAMP
T605 SBT1-A
VDR601 680V
T603 SBT1-B
D651 D1NL20 14V RECT
D652 D1NL20 14V RECT
IC601 L78M12CV 12V REG
D653 D1NL20 PROTECT
D654 D1NL20 PROTECT
D655 MTZJ-5.6 T605 RECT
Q607 2SD2096 CONV
Q671 JA101 SW
D673 1SS133 PROTECT
12V
5V
8V
CN611 3P WHT :VM
RY (-)
RY (+)
WHT
RED
CN606 3P WHT :S-MICRO
ST 5V
ST 8V
GND
TO A BOARD CN308
G
(POWER SUPPLY)
B-SS1ASM<AEP>-G..
CN612 2P
ST12V
RY
(POWER RELAY)
G1
D691 1SS133
RY691 OST-S-112BM POWER RELAY
B-SS1ASM<AEP>-G1.

NOTE
* Q601 AND Q602 VOLTAGES MEASURED WITH RESPECT TO CN604 PIN 1.

G1 (PROTECT) **G** (POWER SUPPLY) **Y** [A/V SW AUDIO AMP AC RECT] **H1** (DEMODULATOR) **H2** (STBY SW)

H3 [TV/VIDEO SW]

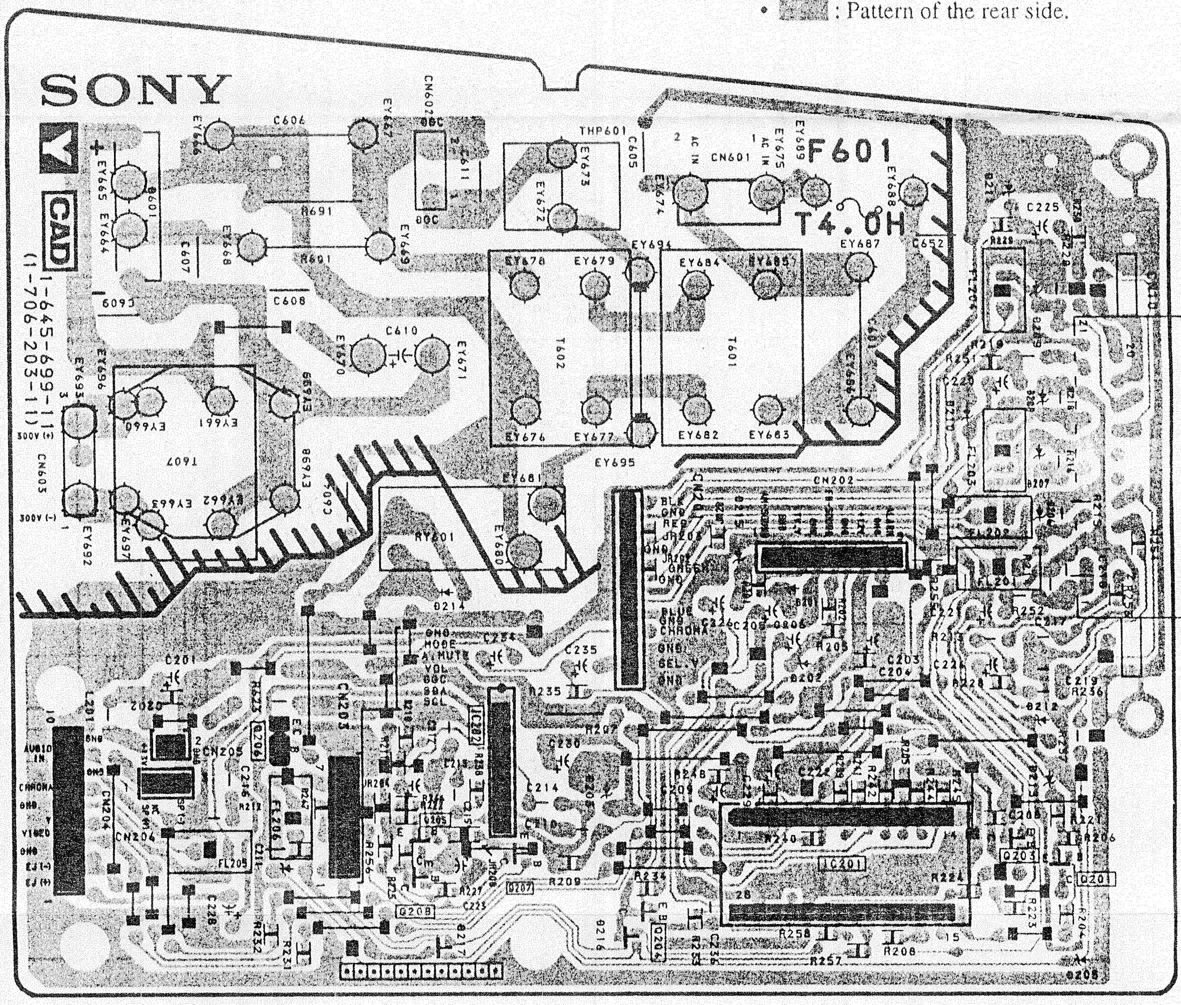
- G Board -



Note :

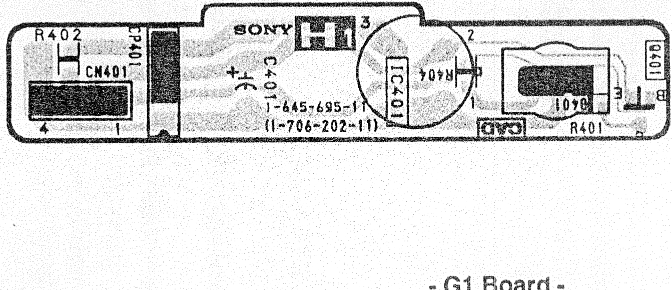
- ▨ : Pattern from the viewed side.
- ▨ : Pattern of the rear side.

- Y Board -



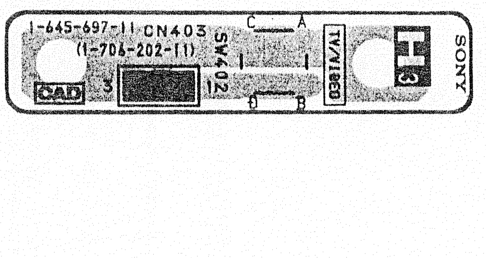
SONY
Y
CAD
1-645-699-11
(1-706-203-11)
F601
T4.0H

- H1 Board -



SONY
H1
1-645-695-11
(1-706-202-11)
CAD

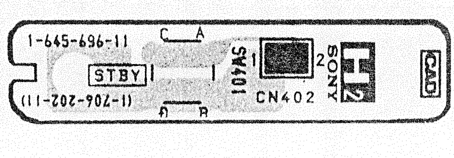
- H3 Board -



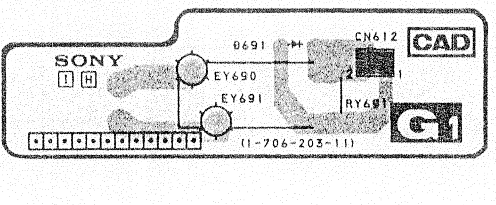
1-645-697-11
(1-706-202-11)
SW402
TV/VIDEO
H3
SONY
CAD

- G1 Board -

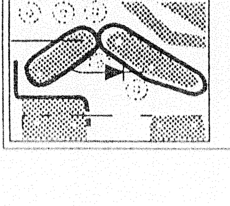
- H2 Board -



1-645-696-11
STBY
SW401
CN402
H2
SONY
CAD
(1-706-202-11)

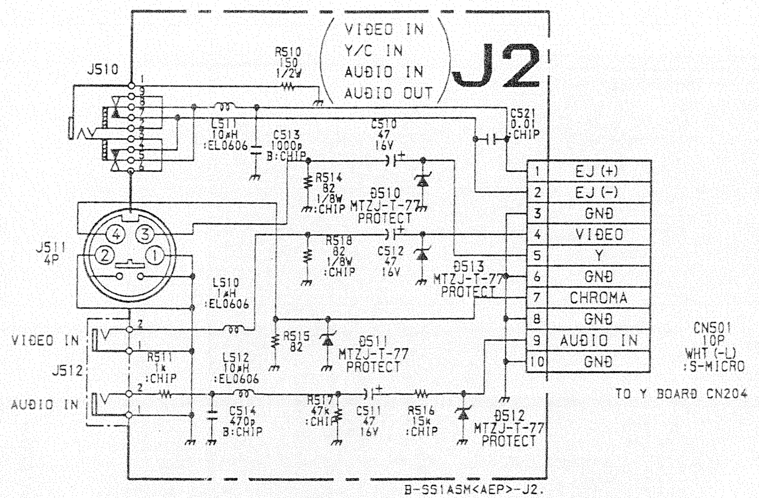


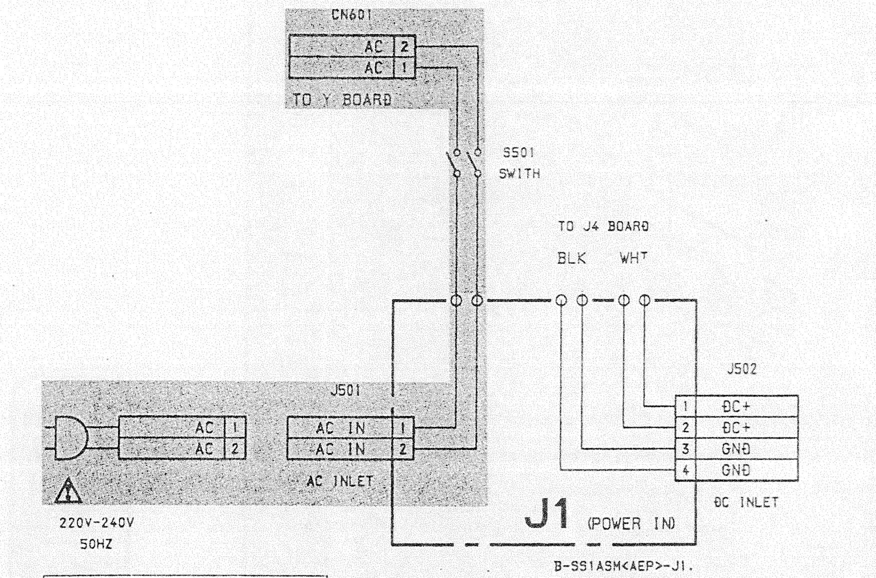
SONY
CN612
CAD
EY690
EY691
RY691
G1
(1-706-203-11)



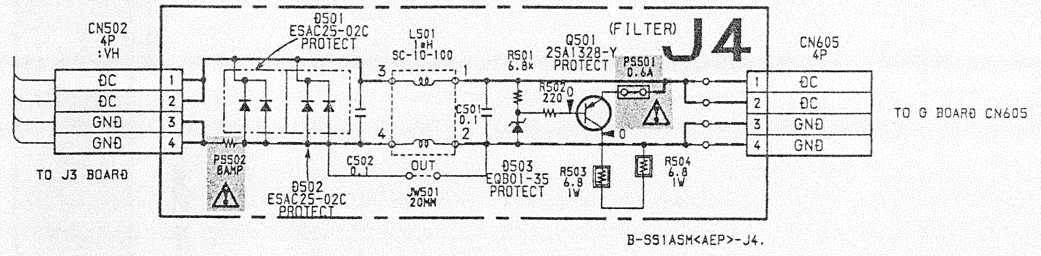
NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock during inspection or repair.


J2
VIDEO IN
Y/C IN
AUDIO IN
AUDIO OUT
J510
R510 150 1/2W
L511 10uH :EL0606
C513 1000p B:CHIP
C510 47 16V
C521 0.01 :CHIP
R514 82 1/8W :CHIP
D510 MTZJ-T-77 PROTECT
R518 82 1/8W :CHIP
C512 47 16V
D513 MTZJ-T-77 PROTECT
J511 4P
L510 1uH :EL0606
VIDEO IN
J512
AUDIO IN
R511 1k :CHIP
L512 10uH :EL0606
R515 82
D511 MTZJ-T-77 PROTECT
C514 470p B:CHIP
R517 47k :CHIP
C511 47 16V
R516 15k :CHIP
D512 MTZJ-T-77 PROTECT
1 EJ (+)
2 EJ (-)
3 GND
4 VIDEO
5 Y
6 GND
7 CHROMA
8 GND
9 AUDIO IN
10 GND
CN501 10P WHT (-L) :S-MICRO
TO Y BOARD CN204
B-SS1ASM<AEP>-J2.


CN601
AC 2
AC 1
TO Y BOARD
S501 SWITH
TO J4 BOARD
BLK
WHT
J502
1 DC+
2 DC+
3 GND
4 GND
DC INLET
J501
AC 1
AC 2
AC IN 1
AC IN 2
AC INLET
220V-240V
50HZ
J1 (POWER IN)
B-SS1ASM<AEP>-J1.

NOTE
UK MODEL USES 3 PIN PLUG

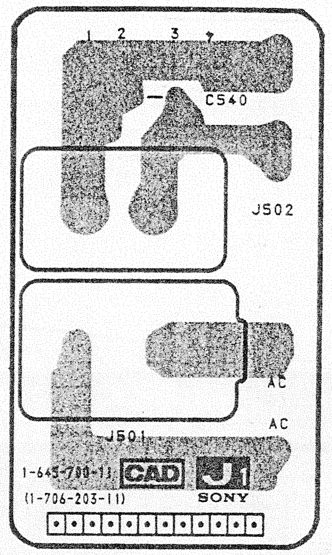

J4
(FILTER)
CN502 4P :VH
1 DC
2 DC
3 GND
4 GND
TO J3 BOARD
D501 ESAC25-02C PROTECT
L501 1mH SC-10-100
R501 6.8k
Q501 2SA1328-Y PROTECT
R502 220
PS501 0.6A
C501 0.1
C502 0.1
OUT
JW501 20MM
PS502 8AMP
D502 ESAC25-02C PROTECT
D503 EQB01-35 PROTECT
R503 6.8 1W
R504 6.8 1W
CN605 4P
1 DC
2 DC
3 GND
4 GND
TO G BOARD CN605
B-SS1ASM<AEP>-J4.

J1 (AC/DC IN)

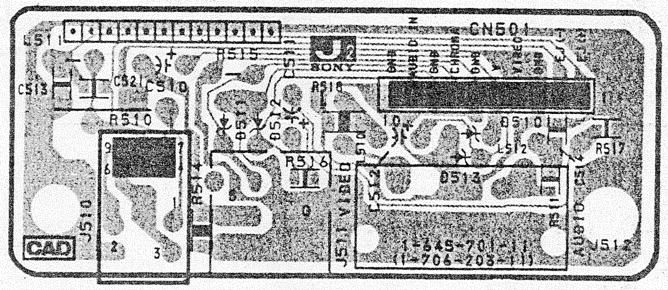
J2 [VIDEO/AUDIO IN
Y/C IN
AUDIO OUT]

J4 (FILTER)

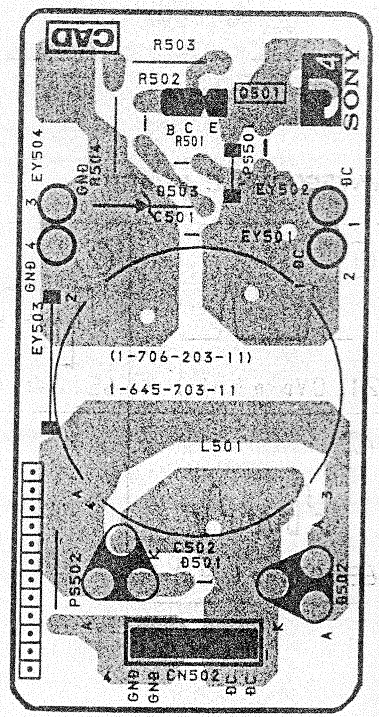
- J1 Board -

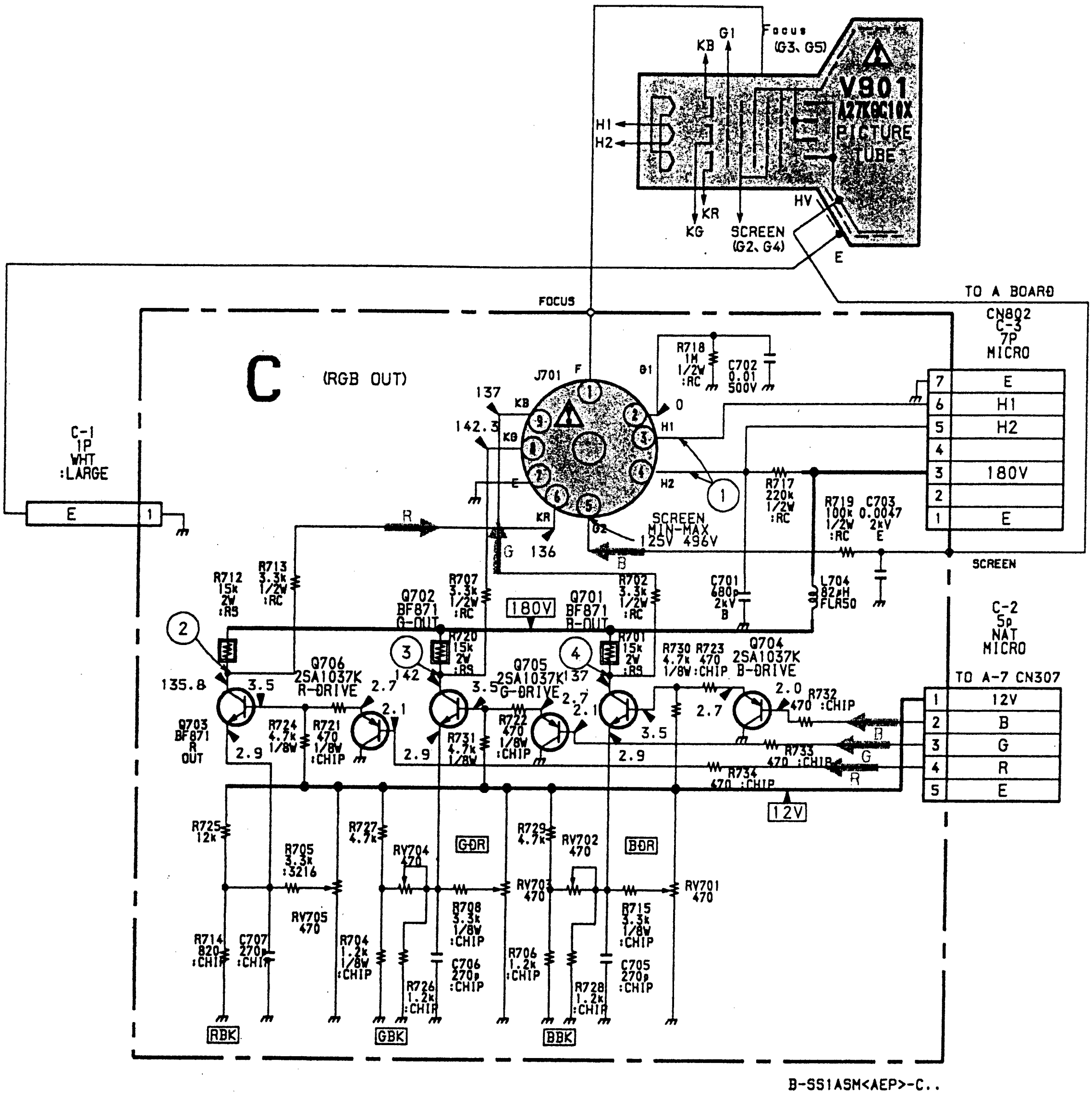

C540
J502
AC
J501
1-645-700-11
(1-706-203-11)
CAD
J1
SONY

- J2 Board -


L511
R515
CN501
J2 SONY
C513
C521
C510
R518
R510
D511
D512
D510
R514
R516
D513
R517
C512
J510
J511 VIDEO
AUDIO
J512
1-645-701-11
(1-706-203-11)
CAD

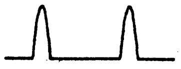
- J4 Board -


CAD
R503
R502
Q501
J4 SONY
B C E
R501
EY504
R504
D503
C501
EY502
EY501
DC
GND
EY503
(1-706-203-11)
1-645-703-11
L501
C502
D501
PS502
D502
CN502


C
(RGB OUT)
V901
A27KGC10X
PICTURE TUBE
G1
KB
Focus (G3, G5)
H1
H2
KR
KG
SCREEN (G2, G4)
HV
E
FOCUS
TO A BOARD
CN802
C-3
7P
MICRO
7 E
6 H1
5 H2
4
3 180V
2
1 E
J701
F
G1
KB
KG
KR
E
H1
H2
G2
137
142.3
0
136
SCREEN MIN-MAX 125V 496V
R718 1M 1/2W :RC
C702 0.01 500V
R717 220k 1/2W :RC
R719 100k 1/2W :RC
C703 0.0047 2kV E
C701 680p 2kV B
L704 82μH FLR50
SCREEN
C-1 1P WHT :LARGE
E
1
R
G
B
R712 15k 2W :RS
R713 3.3k 1/2W :RC
R707 3.3k 1/2W :RC
R702 3.3k 1/2W :RC
Q702 BF871 G-OUT
Q701 BF871 B-OUT
180V
R720 15k 2W :RS
R701 15k 2W :RS
Q706 2SA1037K R-DRIVE
Q705 2SA1037K G-DRIVE
Q704 2SA1037K B-DRIVE
R730 4.7k
R723 470 1/8W :CHIP
135.8
3.5
2.7
2.1
142
3.5
2.7
2.1
137
3.5
2.0
2.7
2.9
2.9
2.9
Q703 BF871 R OUT
R724 4.7k 1/8W
R721 470 1/8W :CHIP
R731 4.7k 1/8W
R722 470 1/8W :CHIP
R732 470 :CHIP
R733 470 :CHIP
R734 470 :CHIP
C-2 5P NAT MICRO
TO A-7 CN307
1 12V
2 B
3 G
4 R
5 E
12V
R725 12k
R705 3.3k :3216
R727 4.7k
RV704 470
GDR
R729 4.7k
RV702 470
BDR
RV705 470
R708 3.3k 1/8W :CHIP
RV703 470
R715 3.3k 1/8W :CHIP
RV701 470
R714 820 :CHIP
C707 270p :CHIP
R704 1.2k 1/8W :CHIP
R726 1.2k :CHIP
C706 270p :CHIP
R706 1.2k :CHIP
R728 1.2k :CHIP
C705 270p :CHIP
RBK
GBK
BBK
①
②
③
④
B-SS1ASM<AEP>-C..

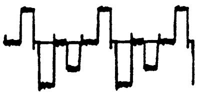
WAVEFORMS C BOARD

①



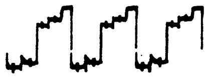
21.0Vp-p (H)

②



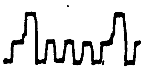
65.0Vp-p (H)

③



65.0Vp-p (H)

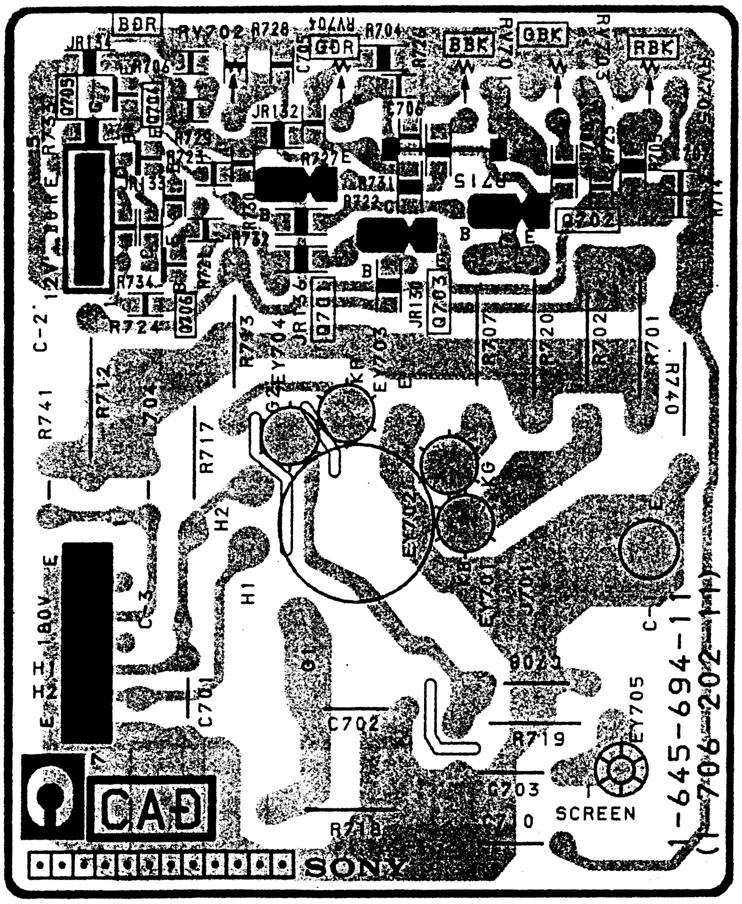
④



65.0Vp-p (H)

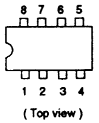
C

- C Board -

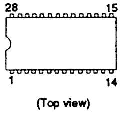

BDR
RV702
R728
RV704
R704
GDR
BBK
GBK
RBK
JR134
R706
Q705
Q704
JR132
C705
C706
R729
R723
R727
R731
R722
JR133
R715
Q702
R734
R724
Q706
Q701
Q703
JR130
R707
R720
R702
R701
R740
12V
C-2
R741
R712
L702
R743
EY704
EY703
R717
G2
KR
KG
H2
H1
EY702
EY701
J701
E
180V
H1
H2
C-3
C701
G1
C702
R719
R703
R718
EY705
SCREEN
C-1
1-645-694-11
(1-706-202-11)
CAD
SONY

4. SEMICONDUCTORS

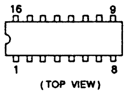
PCF 8583
SDA2546
RC4558P
BA4558


8 7 6 5
1 2 3 4
(Top view)

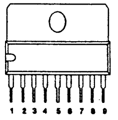
CXA1114P


28
15
1
14
(Top view)

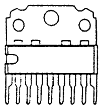
TDA4661-V2
TDA8362-N3
TDA3843-V3


16
9
1
8
(TOP VIEW)

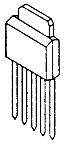
UPC1498H



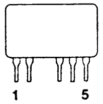
TDA1013B



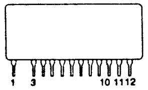
L78LR05DMA



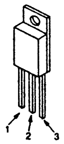
DM-45



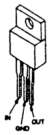
DM-46



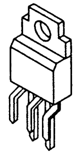
ESAC25-04C



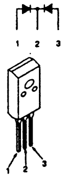
LM78M08CV
M5F78M12L
UPC24M05HF
UPC24M12HF
L78M12CV



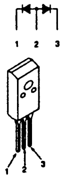
SI-3120CA



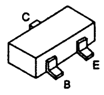
D8LC20U
D8LC20UR



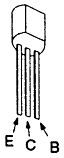
D10SC4MR



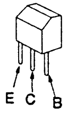
2SA1162-G
2SC2412K-QR
DTA144EK
DTC144ES
2SC3931-B-TX
2SC1623-L5L6
2SA1037K
DTA124EK



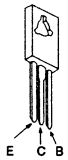
JC501TP-Q
JA101TP-Q
BF871



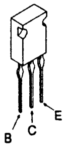
2SA1221-L



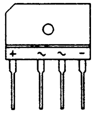
2SC2688-LK



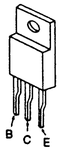
2SD2096-EF



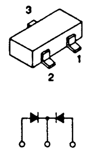
RBV-406H-01



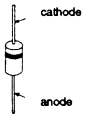
2SD1408-Y
2SA1329-0
2SD1761-E
2SA1328-Y



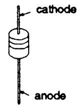
MA152WK
DAN202K
MA704WK



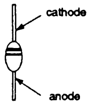
DIN20R
DINL20
EQB01-35
RU-3AM
ERC06-15S
EGP20G
RGP10G
RGP15J



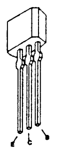
MTZJ-T-77-33A
MTZJ-T-77-5.1B
MTZJ-T-77-5.6B
MTZJ-T-77-6.2B
MTZJ-T-77-16B
MTZJ-T-77-12B
MTZJ-T-77-9.1B
MTZJ-9.1
MTZJ-33A
RD5.1ESB
RD5.6ESB
RD6.2ESB
RD12ESB
RD18ESB
1SS119
1SS168
1SS238
1SS133T-77



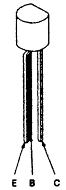
U05G
GP08DPKG23



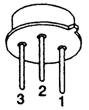
2SC2785
2SA1175
JC501TP-Q
2SA1309A



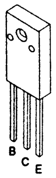
BF199
BF959



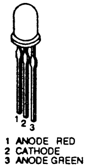
BX-1393



2SC4833
2SC4876



SPR-54MVW



SECTION 6

EXPLODED VIEWS

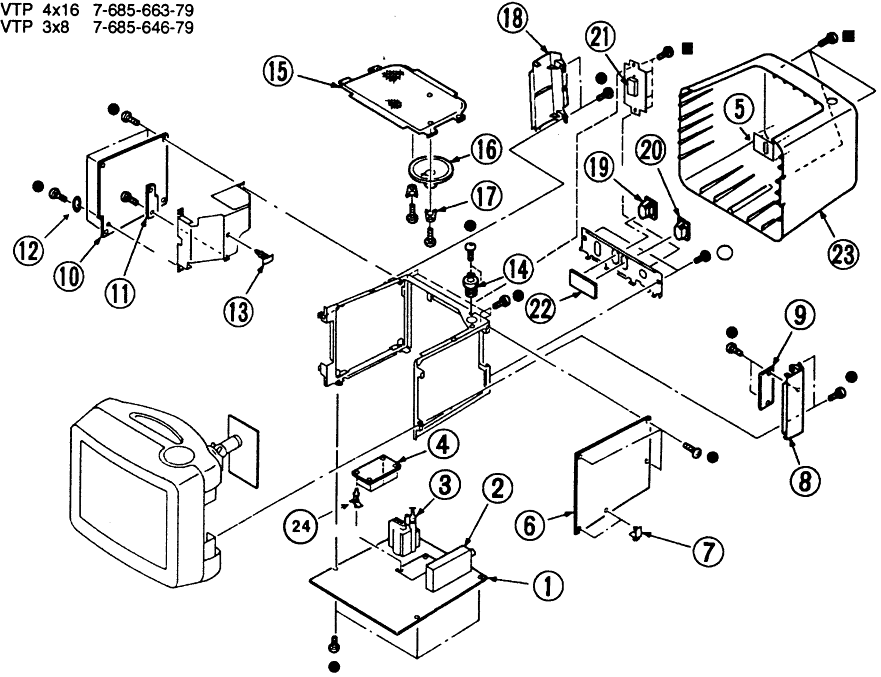
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS

● : BVTP 3x12 7-685-648-79
■ : BVTP 4x16 7-685-663-79
○ : BVTP 3x8 7-685-646-79



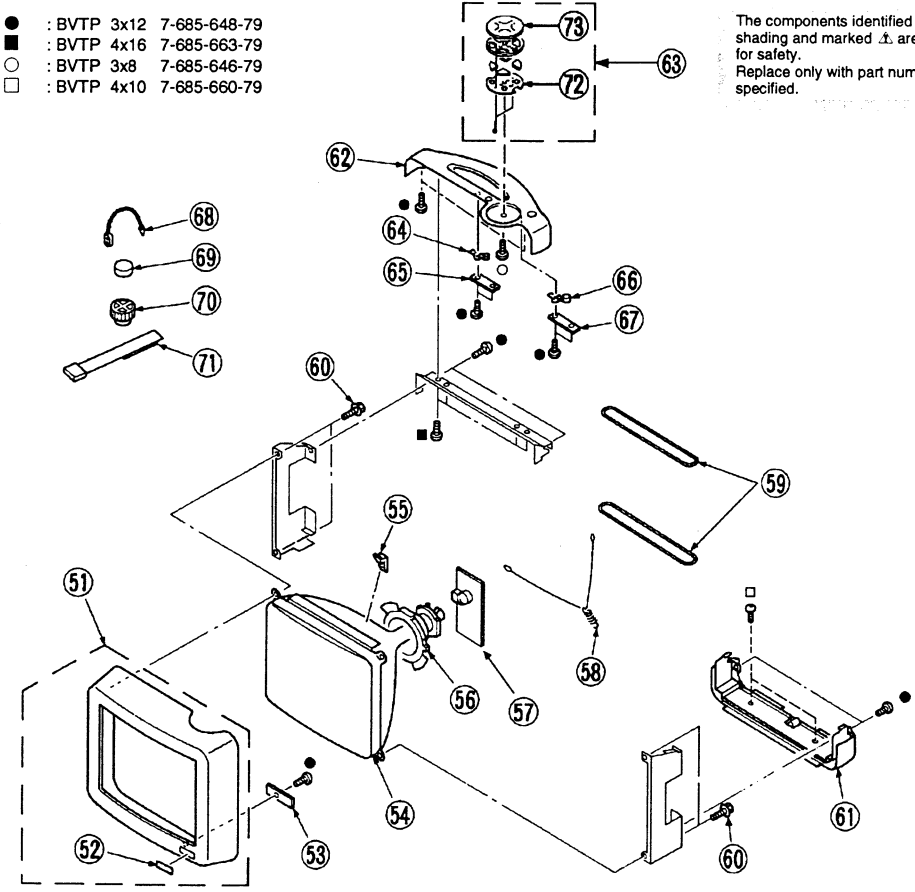
REF.NO.	PART NO	DESCRIPTION	REMARK
1	* A-1632-107-A	A BOARD, COMPLETE	
2	1-693-185-11	TUNER, ET (UV-916H)	
3	⚠ **1-439-476-11**	**TRANSFORMER ASSY, FLYBACK**	
4	* 1-645-703-11	J4 BOARD	
5	4-035-419-11	WINDOW	
6	* A-1654-009-A	Y BOARD, COMPLETE	
7	* 3-701-832-00	HINGE, CIRCUIT BOARD	
8	4-035-436-11	PLATE (RIGHT), SIDE	
9	* 1-645-701-11	J2 BOARD	
10	* A-1637-001-A	G BOARD, COMPLETE	
11	* 1-646-170-11	G1 BOARD	
12	4-309-378-00	SPACER	

REF.NO.	PART NO	DESCRIPTION	REMARK
13	* 3-704-198-11	SUPPORT, PC	
14	4-035-428-11	BRACKET, ANTENNA	
15	4-035-447-11	PLATE, SPEAKER	
16	1-544-187-11	SPEAKER	
17	* 4-338-106-00	HOLDER, SPEAKER	
18	4-035-440-11	PLATE (LEFT), SIDE	
19	1-561-530-00	CONNECTOR (DC POWER)	
20	⚠ **1-540-054-11**	**INLET, AC**	
21	⚠ **1-572-960-11**	**SWITCH SEESAW (AC POWER)**	
22	* 1-645-700-11	J1 BOARD	
23	4-035-439-11	COVER, REAR	
24	* 4-385-948-01	HOLDER, PCB	

6-2. PICTURE TUBE

● : BVTP 3x12 7-685-648-79
■ : BVTP 4x16 7-685-663-79
○ : BVTP 3x8 7-685-646-79
□ : BVTP 4x10 7-685-660-79

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.



REF.NO.	PART NO	DESCRIPTION	REMARK
51	X-4030-222-2	BEZNET ASSY	52
52	4-035-423-11	WINDOW, ORNAMENTAL	
53	* 1-645-695-11	H1 BOARD	
54	⚠ 8-735-821-05	PICTURE TUBE (A27KGC10X)	
55	3-703-003-00	SPACER, DY	
56	⚠ 1-451-354-11	DEFLECTION YOKE (Y11SLA)	
57	* A-1638-031-A	C BOARD, COMPLETE	
58	4-303-774-99	SPRING	
59	⚠ 1-426-590-11	COIL, DEMAGNETIZATION	
60	4-036-190-01	SCREW (5), TAPPING	
61	4-035-437-11	PLATE, BOTTOM	
62	4-035-441-11	PLATE ASSY, TOP	
63	1-466-678-11	SWITCH BLOCK	
64	4-035-432-11	BUTTON (A), MULTI	
65	* 1-645-697-11	H3 BOARD	
66	4-035-429-11	BUTTON (B), MULTI	
67	* 1-645-696-11	H2 BOARD	
68	4-308-870-00	CLIP, LEAD WIRE	
69	1-452-512-11	MAGNET	
70	1-452-094-00	MAGNET, ROTATABLE DISK; 15mm	
71	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	
72	* 9-902-396-01	PW BOARD	
73	9-904-196-01	SHEET RUBBER	

A

SECTION 7
ELECTRICAL PARTS LIST

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
MF : μF, PF : μμF

COILS
MMH : mH, UH : μH

REF.NO.	PART NO.	DESCRIPTION		REMARK
	*A-1632-107-A	A BOARD, COMPLETE *****************		
	4-382-854-11	SCREW (M3X10), P, SW (+)		
		< CAPACITOR >		
C1	1-125-447-11	CAP, DOUBLE LAYERS 1.0F		
C2	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C3	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C4	1-163-109-00	CERAMIC CHIP 47PF	5%	50V
C5	1-126-176-11	ELECT 220MF	20%	6.3V
C6	1-123-382-00	ELECT 3.3MF	20%	50V
C8	1-163-109-00	CERAMIC CHIP 47PF	5%	50V
C9	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C10	1-126-233-11	ELECT 22MF	20%	50V
C11	1-124-907-11	ELECT 10MF	20%	50V
C12	1-124-908-11	ELECT 22MF	20%	50V
C13	1-124-907-11	ELECT 10MF	20%	50V
C14	1-124-907-11	ELECT 10MF	20%	50V
C15	1-124-907-11	ELECT 10MF	20%	50V
C16	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C17	1-126-233-11	ELECT 22MF	20%	25V
C18	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C19	1-163-034-00	CERAMIC CHIP 0.033MF		50V
C20	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C21	1-163-035-00	CERAMIC CHIP 0.047MF		50V
C23	1-124-925-11	ELECT 2.2MF	20%	50V
C24	1-136-015-00	CERAMIC CHIP 0.0033MF		50V
C25	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C26	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C28	1-164-336-11	CERAMIC CHIP 0.33MF		25V
C29	1-163-021-11	CERAMIC CHIP 0.01MF	10%	50V
C30	1-126-233-11	ELECT 22MF	20%	50V
C31	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C35	1-163-093-00	CERAMIC CHIP 10PF	5%	50V
C36	1-163-093-00	CERAMIC CHIP 10PF	5%	50V
C37	1-163-093-00	CERAMIC CHIP 10PF	5%	50V
C39	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C40	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C41	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C42	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C43	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C44	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C45	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C46	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C47	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C48	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C49	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C50	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C51	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C52	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C53	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C54	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C55	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C56	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C57	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C022	1-163-209-00	CERAMIC CHIP 0.0015MF	10%	50V
C101	1-126-233-11	ELECT 22MF	20%	50V
C102	1-124-122-11	ELECT 100MF	20%	50V
C103	1-126-103-11	ELECT 470MF	20%	16V
C104	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C105	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C106	1-126-103-11	ELECT 470MF	20%	16V
C111	1-163-029-11	CERAMIC CHIP 0.0047MF		50V
C112	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C114	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C115	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C116	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C117	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C119	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C120	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C121	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C122	1-124-927-11	ELECT 4.7MF	20%	50V
C123	1-124-907-11	ELECT 10MF	20%	50V
C124	1-124-925-11	ELECT 2.2MF	20%	50V
C126	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C131	1-124-925-11	ELECT 2.2MF	20%	50V
C132	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C133	1-124-925-11	ELECT 2.2MF	20%	50V
C301	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C302	1-126-101-11	ELECT 100MF	20%	16V
C303	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C304	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C305	1-126-101-11	ELECT 100MF	20%	16V
C306	1-126-101-11	ELECT 100MF	20%	16V
C308	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C309	1-163-077-00	CERAMIC CHIP 0.1MF		50V
C310	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C312	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C313	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C314	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C315	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C318	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C319	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C320	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C321	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C322	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C325	1-136-165-00	FILM	0.1MF	5%	50V
C326	1-136-165-00	FILM	0.1MF	5%	50V
C327	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C328	1-136-559-11	MYLAR	0.0047MF	10%	400V
C329	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C330	1-106-220-00	MYLAR	0.1MF	10%	100V
C331	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C332	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C333	1-136-177-00	FILM	1MF	5%	50V
C334	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C335	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C335	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C336	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C337	1-124-925-11	ELECT	2.2MF	20%	50V
C338	1-124-907-11	ELECT	10MF	20%	50V
C339	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C340	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C341	1-124-907-11	ELECT	10MF	20%	50V
C342	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C343	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C345	1-106-375-12	MYLAR	0.022MF	10%	250V
C346	1-136-169-00	FILM	0.22MF	5%	50V
C347	1-124-910-11	ELECT	47MF	20%	50V
C348	1-136-165-00	FILM	0.1MF	5%	50V
C349	1-126-233-11	ELECT	22MF	20%	50V
C350	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C352	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C353	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C354	1-124-119-00	ELECT	330MF	20%	16V
C355	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C356	1-126-233-11	ELECT	22MF	20%	50V
C357	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C358	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V
C359	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C361	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C362	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C363	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C364	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C365	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C366	1-216-295-00	METAL GLAZE	0	5%	1/10W
C368	1-216-295-00	METAL GLAZE	0	5%	1/10W
C370	1-163-108-00	CERAMIC CHIP	43PF	5%	50V
C371	1-163-108-00	CERAMIC CHIP	43PF	5%	50V
C372	1-163-108-00	CERAMIC CHIP	43PF	5%	50V
C501	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C502	1-163-197-00	CERAMIC CHIP	470PF	10%	50V
C503	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C504	1-124-122-11	ELECT	100MF	20%	50V
C505	1-126-233-11	ELECT	22MF	20%	50V
C506	1-106-220-00	MYLAR	0.1MF	10%	100V
C507	1-124-190-00	ELECT	680MF	10%	25V
C508	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C510	1-126-233-11	ELECT	22MF	20%	50V
C511	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C520	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C536	1-124-925-11	ELECT	2.2MF	20%	50V
C801	1-136-559-11	MYLAR	0.0047MF	10%	400V
C802	1-102-212-00	CERAMIC	820PF	10%	500V
C803	1-102-244-00	CERAMIC	220PF	10%	500V
C804	1-126-101-11	ELECT	100MF	20%	16V
C805	1-136-070-00	FILM	0.005MF	3%	2KV
C806	1-136-187-11	FILM	0.047MF	10%	250V
C807	1-162-116-00	CERAMIC	680PF	10%	2KV
C808	1-136-932-11	FILM	0.82MF	5%	100V
C809	1-136-204-11	MYLAR	0.015MF	10%	400V
C810	1-123-935-00	ELECT	33MF	20%	160V
C811	1-136-540-11	FILM	0.82MF	5%	160V
C812	1-124-634-11	ELECT	1MF	20%	250V
C813	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C814	1-123-932-00	ELECT	4.7MF	20%	160V
C815	1-126-233-11	ELECT	22MF	20%	50V
C816	1-102-228-00	CERAMIC	470PF	10%	500V
C817	1-123-948-00	ELECT	22MF	20%	250V
C818	1-106-375-12	MYLAR	0.022MF	10%	250V
C820	1-162-318-11	CERAMIC	0.001MF	10%	500V
C824	1-124-913-11	ELECT	470MF	20%	50V
C825	1-106-367-00	MYLAR	0.01MF	10%	400V
C826	1-104-724-91	FILM	0.1MF	10%	250V
C827	1-136-204-11	MYLAR	0.015MF	10%	400V
C840	1-124-902-00	ELECT	0.47MF	20%	50V
		< FILTER >			
CF301	1-527-840-00	FILTER, CERAMIC			
CF302	1-567-569-11	FILTER, CERAMIC			
CF303	1-409-429-11	TRAP, CERAMIC			
CF304	1-404-801-11	TRAP, CERAMIC			
		<CONNECTOR >			
CN301	*1-564-511-51	PLUG, CONNECTOR 8P			
CN302	*1-568-882-81	PIN, CONNECTOR 7P			
CN303	*1-568-880-71	PIN, CONNECTOR 5P			
CN304	*1-568-879-51	PIN, CONNECTOR 4P			
CN305	*1-568-878-51	PIN, CONNECTOR 3P			
CN306	*1-564-515-11	PLUG, CONNECTOR 12P			
CN307	*1-568-880-71	PIN, CONNECTOR 5P			
CN308	*1-568-882-81	PIN, CONNECTOR 7P			
CN309	*1-568-877-51	PIN, CONNECTOR 2P			
CN311	*1-564-512-11	PLUG, CONNECTOR 9P			
CN801	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
CN802	*1-568-882-51	PIN, CONNECTOR 7P			
		< TRIMMER >			
CV2	1-141-418-11	CAP, ADJ			
		< DIODE >			
D1	8-719-911-19	DIODE 1SS119			
D5	8-719-109-93	DIODE RD6.2ESB2			
D8	8-719-911-19	DIODE 1SS119			
D9	8-719-911-19	DIODE 1SS119			
D10	8-719-911-19	DIODE 1SS119			
D14	8-719-911-19	DIODE 1SS119			
D15	8-719-911-19	DIODE 1SS119			
D17	8-719-109-89	DIODE RD5.6ESB2			
D18	8-719-109-85	DIODE RD5.1ESB2			
D19	8-719-911-19	DIODE 1SS119			
D20	8-719-911-19	DIODE 1SS119			
D21	8-719-109-85	DIODE RD5.1ESB2			
D22	8-719-109-85	DIODE RD5.1ESB2			
D22	8-719-110-49	DIODE RD18ESB2			
D23	8-719-110-49	DIODE RD18ESB2			
D016	8-719-109-89	DIODE RD5.6ESB2			
D101	8-719-982-24	DIODE MTZJ-33A			
D102	8-719-400-18	DIODE MA152WK			
D301	8-719-400-18	DIODE MA152WK			
D303	8-719-109-85	DIODE RD5.1ESB2			
D304	8-719-023-26	DIODE MA704WK-TW			
D305	8-719-903-27	DIODE 1SS168			
D501	8-719-300-33	DIODE RU-3AM			
D502	8-719-400-18	DIODE MA152WK			
D503	8-719-911-19	DIODE 1SS119			
D504	8-719-911-19	DIODE 1SS119			
D801	8-719-945-80	DIODE ERC06-15S			
D802	8-719-979-85	DIODE EGP20G			
D803	8-719-300-33	DIODE RU-3AM			
D805	8-719-300-33	DIODE RU-3AM			
D807	8-719-300-33	DIODE RU-3AM			
D810	8-719-911-55	DIODE U05G			
D811	8-719-911-55	DIODE U05G			
D820	8-719-911-19	DIODE 1SS119			
		< IC >			
IC2	8-759-084-90	IC PCF8583			
IC3	8-759-748-56	IC SDA2546			
IC4	8-759-805-37	IC L78LR05D-MA			
IC001	8-752-830-53	IC CXP85116-SV7029			
IC101	8-759-521-32	IC TDA3843-V3			
IC301	8-759-084-92	IC TDA8362-N3			
IC302	8-759-084-91	IC TDA4661/V2			
IC303	8-759-084-93	IC TDA8395/N1			
IC304	8-759-143-11	IC UPC24M12HF			
IC305	8-759-144-84	IC UPC24M05HF			
IC306	8-759-085-00	IC L78M08CV			
IC501	8-759-113-13	IC UPC1498H			
	*4-389-343-01	SPRING (IC501)			
IC801	8-759-945-58	IC RC4558P			
		< COIL >			
L1	1-408-413-00	INDUCTOR	22UH		
L3	1-408-607-21	INDUCTOR	22UH		
L5	1-408-421-00	INDUCTOR	100UH		
L6	1-408-421-00	INDUCTOR	100UH		
L02	1-408-409-00	INDUCTOR	10UH		
L03	1-408-409-00	INDUCTOR	10UH		
L04	1-408-409-00	INDUCTOR	10UH		
L102	1-408-399-00	INDUCTOR	1.5UH		
L103	1-408-413-00	INDUCTOR	22UH		
L301	1-410-119-11	INDUCTOR	1MMH		
L303	1-408-407-00	INDUCTOR	6.8UH		
L304	1-408-409-00	INDUCTOR	10UH		
L305	1-408-426-00	INDUCTOR	270UH		
L308	1-408-406-00	INDUCTOR	5.6UH		
L309	1-408-407-00	INDUCTOR	6.8UH		
L310	1-414-194-41	INDUCTOR	33UH		
L311	1-414-194-41	INDUCTOR	33UH		
L312	1-414-194-41	INDUCTOR	33UH		
L313	1-408-417-00	INDUCTOR	47UH		
L801	1-407-365-00	COIL,CHOKE			
L802	1-420-872-00	COIL, AIR CORE			
L804	1-459-856-11	COIL, FERRITE			
L805	1-412-552-21	INDUCTOR	2.2MMH		
L806	1-459-756-12	COIL, HORIZONTAL LINEARITY			
L807	1-410-067-21	INDUCTOR	4.7MMH		
L809	1-407-504-00	INDUCTOR	10MMH		
L810	1-412-530-31	INDUCTOR	27UH		
		< LINK IC >			
PS801	⚠ 1-532-679-91	LINK, IC	0.6A		
		< TRANSISTOR >			
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q4	8-729-901-01	TRANSISTOR DTC144EK			
Q5	8-729-901-01	TRANSISTOR DTC144EK			
Q6	8-729-901-01	TRANSISTOR DTC144EK			
Q7	8-729-901-01	TRANSISTOR DTC144EK			
Q9	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q10	8-729-901-01	TRANSISTOR DTC144EK			
Q11	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q12	8-729-901-01	TRANSISTOR DTC144EK			
Q13	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q14	8-729-901-01	TRANSISTOR DTC144EK			
Q15	8-729-901-01	TRANSISTOR DTC144EK			
Q16	8-729-901-05	TRANSISTOR DTA124EK			
Q17	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q18	8-729-901-01	TRANSISTOR DTC144EK			
Q19	8-729-901-01	TRANSISTOR DTC144EK			
Q101	8-729-907-06	TRANSISTOR BF199-AMMO			
Q102	8-729-014-99	TRANSISTOR BF959			
Q103	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q105	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q301	8-729-216-22	TRANSISTOR 2SA1162-G			
Q302	8-729-901-05	TRANSISTOR DTA124EK			
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q304	8-729-901-01	TRANSISTOR DTC144EK			
Q305	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q306	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q307	8-729-216-22	TRANSISTOR 2SA1162-G			
Q308	8-729-216-22	TRANSISTOR 2SA1162-G			
Q309	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q312	8-729-901-01	TRANSISTOR DTC144EK			
Q313	8-729-901-01	TRANSISTOR DTC144EK			
Q314	8-729-901-01	TRANSISTOR DTC144EK			
Q501	8-729-216-22	TRANSISTOR 2SA1162-G			
Q801	8-729-119-80	TRANSISTOR 2SC2688-LK			
Q802	8-729-925-64	TRANSISTOR BU508AS2			
Q803	8-729-202-03	TRANSISTOR 2SD1408-Y			

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< RESISTOR >				
JR302	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR304	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR305	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR306	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR308	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR309	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR312	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR318	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR319	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR320	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR321	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR322	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR323	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR324	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR326	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR328	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR335	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR336	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR337	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR341	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR342	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR343	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR344	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR345	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR346	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR347	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR348	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R7	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R8	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R9	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R10	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R11	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R12	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R13	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R14	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R15	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R16	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R17	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R19	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R20	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R21	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R22	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R23	1-216-260-00	METAL GLAZE	390K	5%	1/8W	
R24	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R25	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R26	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R27	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R28	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R29	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R30	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R31	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R32	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R33	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R35	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R36	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R37	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R38	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R39	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R40	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R41	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R42	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R43	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R44	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R45	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R46	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R47	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R48	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R51	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R52	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R53	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R54	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R55	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R59	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R60	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R61	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R62	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R68	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R69	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R70	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R71	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R72	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R73	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R74	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R75	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R76	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R77	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R78	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R79	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R80	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R81	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R85	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R86	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R87	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R88	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R89	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R90	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R91	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R92	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R93	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R94	1-216-232-00	METAL GLAZE	27K	5%	1/8W	
R96	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R97	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R98	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R99	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R100	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R101	1-215-898-11	METAL OXIDE	10K	5%	2W	F
R102	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R103	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R104	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R105	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R106	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R107	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R109	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R110	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R111	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R112	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R113	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R114	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R115	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R116	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R117	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R118	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R119	1-216-238-00	METAL GLAZE	47K	5%	1/8W	
R120	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R121	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R122	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R123	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R124	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R125	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R126	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R127	1-216-212-00	METAL GLAZE	3.9K	5%	1/8W	
R128	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R134	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R135	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R136	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R137	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R138	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R139	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R140	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R141	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R142	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R143	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R144	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R145	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R146	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R147	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R148	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R149	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R157	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R158	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R160	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R161	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R162	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R163	1-233-067-11	COMPOSITION CIRCUIT BLOCK				
R296	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R297	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R298	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R299	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R300	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R301	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R304	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R306	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R308	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R309	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R310	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R315	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R317	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R318	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R319	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R320	1-216-182-00	METAL GLAZE	220	5%	1/8W	
R321	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R324	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R327	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R328	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R329	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	
R330	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R333	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R334	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R335	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R336	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R337	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R338	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R339	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R340	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R341	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R342	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R343	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R344	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R345	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R346	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R347	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R348	1-216-174-00	METAL GLAZE	100	5%	1/8W	
R351	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R352	1-216-198-00	METAL GLAZE	1K	5%	1/8W	
R353	1-216-031-00	METAL GLAZE	180	5%	1/10W	
R501	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R502	1-247-744-11	CARBON	270	5%	1/2W	
R503	1-249-439-11	CARBON	68K	5%	1/4W	
R504	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R505	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R507	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R508	1-215-867-00	METAL OXIDE	470	5%	1W	
R511	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R512	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R513	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R514	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R527	1-215-869-11	METAL OXIDE	1K	5%	1W	
R532	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R542	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R543	1-249-413-11	CARBON	470	5%	1/4W	
R544	1-249-410-11	CARBON	270	5%	1/4W	
R801	1-217-778-11	FUSIBLE	1K	5%	1W	F
R802	1-217-826-11	FUSIBLE	10K	5%	1/4W	
R803	1-216-355-11	METAL OXIDE	3.3	5%	1W	F
R804	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R805	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R806	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R807	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R808	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R809	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R810	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R811	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R813	1-212-877-11	FUSIBLE	68	5%	1/4W	
R814	1-217-820-11	FUSIBLE	3.3K	5%	1/4W	
R816	1-247-887-00	CARBON	220K	5%	1/4W	
R817	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R818	1-202-830-00	SOLID	10K	10%	1/2W	
R819	1-217-811-11	FUSIBLE	0.47	5%	1/4W	
R821	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R822	1-216-204-00	METAL GLAZE	1.8K	5%	1/8W	
R823	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R824	1-215-863-11	METAL OXIDE	100	5%	1W	F
R825	1-249-382-11	CARBON	1.2	5%	1/4W	F
R826	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R827	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R828	1-216-447-00	METAL OXIDE	27	5%	2W	F
R829	1-216-119-00	METAL GLAZE	820K	5%	1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R851	1-247-895-00	CARBON	470K	5%	1/4W	
		< RESISTOR VARIABLE >				
RV101	1-241-632-11	RES, ADJ, CARBON 47K				
RV501	1-241-630-11	RES, ADJ, CARBON 10K				
RV505	1-238-011-11	RES, ADJ, CARBON 470				
RV801	1-241-632-11	RES, ADJ, CARBON 47K				
RV802	1-241-630-11	RES, ADJ, CARBON 10K				
		< SWITCH >				
S801	1-554-186-00	SWITCH, LEVER				
		< SPARK GAP >				
SG801	1-519-422-11	GAP, SPARK				
		< FILTER >				
SWF101	1-579-120-11	FILTER, SURFACE WAVE				
SWF102	1-579-313-21	FILTER, SAWTOOTH WAVE				
SWF103	1-404-712-11	SAWF				
		< TRANSFORMER >				
T101	1-404-806-11	COIL				
T301	1-404-558-11	COIL				
T302	1-404-556-11	COIL				
T801	1-437-090-00	HDT				
T802	⚠ 1-439-476-11	TRANSFORMER ASSY, FLYBACK				
		< TUNER >				
TU101	1-693-185-11	TUNER (UV916H)				
		< CRYSTAL >				
X1	1-577-082-11	VIBRATOR, CERAMIC				
X2	1-527-997-21	VIBRATOR, CRYSTAL				
X301	1-567-504-11	OSCILLATOR, CRYSTAL				
X302	1-567-505-11	OSCILLATOR, CRYSTAL				

****

*A-1637-001-A G BOARD, COMPLETE
****

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< CAPACITOR >				
C602	1-161-742-00	CERAMIC	0.0022MF	20%	400V	
C603	1-162-130-11	CERAMIC	180PF	10%	2KV	
C612	1-128-385-91	ELECT	470MF	20%	1.6V	
C613	1-128-375-51	ELECT	120MF	20%	25V	
C614	1-124-786-11	ELECT	22MF	20%	35V	
C615	1-126-800-51	ELECT	2200MF	20%	35V	
C616	1-136-153-00	FILM	0.01MF	5%	50V	
C617	1-136-153-00	FILM	0.01MF	5%	50V	
C618	1-136-153-00	FILM	0.01MF	5%	50V	
C619	1-136-153-00	FILM	0.01MF	5%	50V	
C620	1-137-189-81	FILM	0.18MF	5%	50V	
C621	1-137-189-81	FILM	0.18MF	5%	50V	
C622	1-137-189-81	FILM	0.18MF	5%	50V	
C623	1-137-189-81	FILM	0.18MF	5%	50V	
C624	1-136-153-00	FILM	0.01MF	5%	50V	
C625	1-136-153-00	FILM	0.01MF	5%	50V	
C626	1-137-572-11	FILM	0.056MF	5%	400V	
C627	1-137-552-11	FILM	0.23MF	5%	42V	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C628	1-124-126-00	ELECT	47MF	20%	25V
C629	1-128-375-51	ELECT	120MF	20%	25V
C630	1-128-102-11	ELECT	1200MF	20%	16V
C631	1-126-376-11	ELECT	470MF	20%	25V
C632	1-126-600-11	ELECT	100MF	20%	160V
C633	1-124-122-11	ELECT	100MF	20%	25V
C634	1-101-821-00	CERAMIC	0.0022MF		500V
C635	1-136-165-00	FILM	0.1MF	5%	50V
C636	1-102-038-00	CERAMIC	0.001MF		500V
C637	1-128-375-51	ELECT	120MF	20%	25V
C638	1-126-233-11	ELECT	22MF	20%	50V
C639	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C651	1-136-153-00	FILM	0.01MF	5%	50V
C661	1-164-644-11	CERAMIC	330PF	10%	500V
C662	1-136-129-00	FILM	0.3MF	5%	400V
C663	1-162-130-11	CERAMIC	180PF	10%	2KV
C664	1-162-130-11	CERAMIC	180PF	10%	2KV
C665	1-136-170-00	FILM	0.27MF	5%	50V
C667	1-136-170-00	FILM	0.27MF	5%	50V
C668	1-137-573-11	FILM	0.0047MF	5%	630V
C669	1-136-067-00	FILM	0.0036MF	3%	2KV
C670	1-128-385-91	ELECT	470MF	20%	1.6V
		< CONNECTOR >			
CN604	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P			
CN605	*1-580-838-11	PIN, CONNECTOR (PC BOARD) 4P			
CN606	*1-568-878-51	PIN, CONNECTOR 3P			
CN607	*1-564-511-51	PLUG, CONNECTOR 8P			
CN608	*1-564-505-11	PLUG, CONNECTOR 2P			
CN610	*1-568-879-81	PIN, CONNECTOR 4P			
CN611	*1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D602	8-719-510-48	DIODE D1N20R			
D603	8-719-510-48	DIODE D1N20R			
D604	8-719-510-48	DIODE D1N20R			
D615	8-719-911-19	DIODE 1SS119			
D616	8-719-510-48	DIODE D1N20R			
D617	8-719-510-48	DIODE D1N20R			
D618	8-719-510-48	DIODE D1N20R			
D619	8-719-510-48	DIODE D1N20R			
D620	8-719-510-48	DIODE D1N20R			
D621	8-719-510-48	DIODE D1N20R			
D622	8-719-510-48	DIODE D1N20R			
D623	8-719-510-48	DIODE D1N20R			
D628	8-719-510-26	DIODE D1NL20-TA2			
D629	8-719-110-49	DIODE RD18ESB2			
D651	8-719-510-26	DIODE D1NL20-TA2			
D652	8-719-510-26	DIODE D1NL20-TA2			
D653	8-719-510-26	DIODE D1NL20-TA2			
D654	8-719-510-26	DIODE D1NL20-TA2			
D655	8-719-109-89	DIODE RD5.6ESB2			
D661	8-719-510-13	DIODE D10SC4MR			
D662	8-719-510-12	DIODE D10SC4M			
D665	8-719-025-11	DIODE D8LC20UR			
D666	8-719-025-10	DIODE D8LC20U			
D671	8-719-110-49	DIODE RD18ESB2			
D672	8-719-510-26	DIODE D1NL20-TA2			
D673	8-719-911-19	DIODE 1SS119			
D674	8-719-510-48	DIODE D1N20R			

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< FERRITE BEAD >				
FB601	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB602	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB603	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB604	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB605	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB606	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB607	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB608	1-412-911-11	INDUCTOR, FERRITE BEAD				
FB609	1-410-396-41	FERRITE BEAD INDUCTOR				
FB610	1-410-396-41	FERRITE BEAD INDUCTOR				
FB611	1-543-194-00	CORE, BEAD				
FB612	1-543-194-00	CORE, BEAD				
		< IC >				
IC601	8-759-604-39	IC M5F78M12L				
	4-382-854-01	SCREW (M3X8), P, SW (+) (IC601)				
IC603	8-749-921-99	IC SI-3120CA				
	4-382-854-01	SCREW (M3X8), P, SW (+) (IC603_				
IC604	1-809-703-11	MODULE, POWER DM-46				
IC605	1-809-704-11	MODULE, POWER DM-45				
		< COIL >				
L602	1-412-533-21	INDUCTOR	47UH			
		< TRANSISTOR >				
Q601	8-729-010-85	TRANSISTOR 2SC4833				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q601)				
Q602	8-729-010-85	TRANSISTOR 2SC4833				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q602)				
Q603	8-729-011-74	TRANSISTOR 2SC4876				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q603)				
Q604	8-729-011-74	TRANSISTOR 2SC4876				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q604)				
Q605	8-729-011-74	TRANSISTOR 2SC4876				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q605)				
Q606	8-729-011-74	TRANSISTOR 2SC4876				
	4-382-854-11	SCREW (M3X10), P, SW (+) (Q606)				
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF				
Q608	8-729-920-92	TRANSISTOR 2SD2096-EF				
Q610	8-729-122-12	TRANSISTOR 2SA1221-L				
Q611	8-729-920-92	TRANSISTOR 2SD2096-EF				
Q671	8-729-173-38	TRANSISTOR JA101TP-Q				
Q672	8-729-173-38	TRANSISTOR JA101TP-Q				
		< RESISTOR >				
R602	1-218-265-11	METAL GLAZE	8.2M	5%	1W	
R603	1-215-859-00	METAL OXIDE	22	5%	1W	F
R604	1-215-859-00	METAL OXIDE	22	5%	1W	F
R605	1-202-844-00	SOLID	330K	10%	1/2W	
R606	1-202-844-00	SOLID	330K	10%	1/2W	
R607	1-215-859-00	METAL OXIDE	22	5%	1W	F
R608	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R609	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R610	1-249-429-11	CARBON	10K	5%	1/4W	
R611	1-249-429-11	CARBON	10K	5%	1/4W	
R613	1-216-341-11	METAL OXIDE	0.22	5%	1W	F

REF.NO.	PART NO.	DESCRIPTION				REMARK
R614	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R615	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R616	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R617	1-216-354-11	METAL OXIDE	2.7	5%	1W	F
R618	1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R619	1-216-354-11	METAL OXIDE	2.7	5%	1W	F
R620	1-216-354-11	METAL OXIDE	2.7	5%	1W	F
R626	1-216-422-11	METAL OXIDE	18	5%	1W	F
R627	1-249-425-11	CARBON	4.7K	5%	1/4W	
R628	1-249-425-11	CARBON	4.7K	5%	1/4W	
R629	1-249-413-11	CARBON	470	5%	1/4W	F
R630	1-249-405-11	CARBON	100	5%	1/4W	F
R631	1-249-405-11	CARBON	100	5%	1/4W	F
R633	1-218-268-11	METAL	0.47	5%	1/2W	
R634	1-218-268-11	METAL	0.47	5%	1/2W	
R635	1-249-394-11	CARBON	12	5%	1/4W	F
R636	1-249-405-11	CARBON	100	5%	1/4W	F
R637	1-216-422-11	METAL OXIDE	18	5%	1W	F
R638	1-249-377-11	CARBON	0.47	5%	1/4W	F
R639	1-249-422-11	CARBON	2.7K	5%	1/4W	
R651	1-249-396-11	CARBON	18	5%	1/4W	F
R652	1-249-421-11	CARBON	2.2K	5%	1/4W	
R653	1-249-418-11	CARBON	1.2K	5%	1/4W	
R661	1-215-857-11	METAL OXIDE	10	5%	1W	F
R671	1-249-424-11	CARBON	3.9K	5%	1/4W	
R672	1-249-420-11	CARBON	1.8K	5%	1/4W	
R673	1-249-418-11	CARBON	1.2K	5%	1/4W	
R674	1-249-421-11	CARBON	2.2K	5%	1/4W	
R675	1-249-424-11	CARBON	3.9K	5%	1/4W	
R676	1-249-421-11	CARBON	2.2K	5%	1/4W	
R677	1-249-429-11	CARBON	10K	5%	1/4W	
R678	1-249-429-11	CARBON	10K	5%	1/4W	
R679	1-249-424-11	CARBON	3.9K	5%	1/4W	
R680	1-249-421-11	CARBON	2.2K	5%	1/4W	
R681	1-217-418-00	FUSIBLE	0.47	10%	1/2W	F
R683	1-535-465-11	LEAD, JUMPER (5MM)				
		< RELAY >				
RY602	1-515-888-11	RELAY				
		< TRANSFORMER >				
T603	1-424-647-11	TRANSFORMER, FERRITE (SBT-1B)				
T604	1-450-862-11	TRANSFORMER, CONVERTER(PRT1-B)				
T605	1-437-213-11	TRANSFORMER, CONVERTER DRIVE				
T606	1-450-861-11	TRANSFORMER, CONVERTER DRIVE				
		< VARISTOR >				
VDR601	1-809-679-11	VARISTOR				
VDR602	1-809-678-11	VARISTOR				

****

*A-1638-031-A C BOARD, COMPLETE
****

REF.NO.	PART NO.	DESCRIPTION				REMARK
	*1-568-880-71	PIN, CONNECTOR 5P				
	*1-568-882-51	PIN, CONNECTOR 7P				
		< SOCKET >				
J701	⚠ 1-526-958-21	SOCKET, CRT				

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< CAPACITOR >				
C701	1-162-116-00	CERAMIC	680PF	10%	2KV	
C702	1-102-050-00	CERAMIC	0.01MF	99%	500V	
C703	1-162-114-00	CERAMIC	0.0047MF		2KV	
C705	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C706	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
C707	1-163-127-00	CERAMIC CHIP	270PF	5%	50V	
		< COIL >				
L704	1-408-420-00	INDUCTOR	82UH			
		< TRANSISTOR >				
Q701	8-729-906-70	TRANSISTOR BF871				
Q702	8-729-906-70	TRANSISTOR BF871				
Q703	8-729-906-70	TRANSISTOR BF871				
Q704	8-729-216-22	TRANSISTOR 2SA1162-G				
Q705	8-729-216-22	TRANSISTOR 2SA1162-G				
Q706	8-729-216-22	TRANSISTOR 2SA1162-G				
		< RESISTOR >				
JR130	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR132	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR133	1-216-295-00	METAL GLAZE	0	5%	1/10W	
JR134	1-216-296-00	METAL GLAZE	0	5%	1/8W	
JR136	1-216-296-00	METAL GLAZE	0	5%	1/8W	
R701	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R702	1-202-824-00	SOLID	3.3K	10%	1/2W	
R704	1-216-200-00	METAL GLAZE	1.2K	5%	1/8W	
R705	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W	
R706	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R707	1-202-824-00	SOLID	3.3K	10%	1/2W	
R708	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W	
R712	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R713	1-202-824-00	SOLID	3.3K	10%	1/2W	
R714	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R715	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W	
R717	1-202-842-11	SOLID	220K	10%	1/2W	
R718	1-202-719-00	SOLID	1M	10%	1/2W	
R719	1-202-838-00	SOLID	100K	10%	1/2W	
R720	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R721	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R722	1-216-190-00	METAL GLAZE	470	5%	1/8W	
R723	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R724	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R725	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R726	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R727	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R728	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R729	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R730	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R731	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R732	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R733	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R734	1-216-041-00	METAL GLAZE	470	5%	1/10W	
		< RESISTOR VARIABLE >				
RV701	1-238-543-11	RES, ADJ, CARBON 470				
RV702	1-238-543-11	RES, ADJ, CARBON 470				
RV703	1-238-543-11	RES, ADJ, CARBON 470				

REF.NO.	PART NO.	DESCRIPTION				REMARK
RV704	1-238-543-11	RES, ADJ, CARBON 470				
RV705	1-238-543-11	RES, ADJ, CARBON 470				

****

	*1-706-203-11	G1 BOARD ********				
		< DIODE >				
D691	8-719-911-19	DIODE 1SS119				
		< RELAY >				
RY691	1-515-738-11	RELAY, POWER				
		< CONNECTOR >				
CN612	*1-564-517-11	PLUG, CONNECTOR 2P				

****

	*1-645-695-11	H1 BOARD ********				
		< CONNECTOR >				
CN401	*1-564-519-11	PLUG, CONNECTOR 4P				
		< CAPACITOR >				
C401	1-126-233-11	ELECT	22MF	20%	50V	
		< CIRCUIT BLOCK >				
CP401	1-232-680-11	COMPOSITION CIRCUIT BLOCK				
		< DIODE >				
D401	8-719-920-55	DIODE SPR-54MVW				
		< IC >				
IC401	8-749-900-36	IC BX-1393				
		< TRANSISTOR >				
Q401	8-729-901-06	TRANSISTOR DTA144EK				
		< RESISTOR >				
R401	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R402	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R404	1-216-043-00	METAL GLAZE	560	5%	1/10W	

****

	*1-645-696-11	H2 BOARD ********				
		< CONNECTOR >				
CN402	*1-564-517-11	PLUG, CONNECTOR 2P				
		< SWITCH >				
SW401	1-554-937-11	SWITCH, KEY BOARD				

****

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
	*1-645-697-11	H3 BOARD ********				
		< CONNECTOR >				
CN403	*1-564-518-11	PLUG, CONNECTOR 3P				
		< SWITCH >				
SW402	1-554-937-11	SWITCH, KEY BOARD				

****

	*1-645-700-11	J1 BOARD ********				

****

	*1-645-703-11	J4 BOARD ********				
		< CAPACITOR >				
C501	1-136-165-00	FILM	0.1MF	5%	50V	
C502	1-136-165-00	FILM	0.1MF	5%	50V	
		< CONNECTOR >				
CN502	*1-580-838-11	PIN, CONNECTOR (PC BOARD) 4P				
CN605	*1-941-970-06	CONNECTOR ASSY, VH 4P				
		< DIODE >				
D501	8-719-912-51	DIODE ESAC25-04C				
D502	8-719-912-51	DIODE ESAC25-04C				
D503	8-719-931-35	DIODE EQB01-35				
		< COIL >				
L501	1-424-648-11	TRANSFORMER, LINE FILTER (LFT)				
		< LINK IC >				
PS501	⚠ 1-532-679-91	LINK, IC 0.6A				
PS502	⚠ 1-532-985-21	LINK, IC 8A				
		< TRANSISTOR >				
Q501	8-729-206-05	TRANSISTOR 2SA1329-O				
		< RESISTOR >				
R501	1-249-427-11	CARBON	6.8K	5%	1/4W	
R502	1-249-409-11	CARBON	220	5%	1/4W	
R503	1-216-359-00	METAL OXIDE	6.8	5%	1W	F
R504	1-216-359-00	METAL OXIDE	6.8	5%	1W	F

****

	*A-1651-044-A	J2 BOARD, COMPLETE *****************				
		< CAPACITOR >				
C510	1-124-477-11	ELECT	47MF	20%	16V	
C511	1-124-477-11	ELECT	47MF	20%	16V	
C512	1-124-477-11	ELECT	47MF	20%	16V	
C513	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C514	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C521	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	

REF.NO.	PART NO.	DESCRIPTION				REMARK
		< CONNECTOR >				
CN501	*1-564-525-11	PLUG, CONNECTOR 10P				
		< DIODE >				
D510	8-719-110-31	DIODE RD12ESB2				
D511	8-719-110-31	DIODE RD12ESB2				
D512	8-719-110-31	DIODE RD12ESB2				
D513	8-719-110-31	DIODE RD12ESB2				
		< SOCKET >				
J510	1-562-837-11	JACK				
J511	1-565-666-12	TERMINAL, S 4P				
J512	1-563-500-21	JACK BLOCK, PIN (L TYPE) 2P				
		< COIL >				
L510	1-408-397-00	INDUCTOR	1UH			
L511	1-408-409-00	INDUCTOR	10UH			
L512	1-408-409-00	INDUCTOR	10UH			
		< RESISTOR >				
R510	1-247-741-11	CARBON	150	5%	1/2W	
R511	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R514	1-216-172-00	METAL GLAZE	82	5%	1/8W	
R515	1-249-404-00	CARBON	82	5%	1/4W	
R516	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R517	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R518	1-216-172-00	METAL GLAZE	82	5%	1/8W	

****

	*A-1654-009-A	Y BOARD, COMPLETE *****************				
		< CAPACITOR >				
C201	1-124-557-11	ELECT	1000MF	20%	25V	
C202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C203	1-124-557-11	ELECT	1000MF	20%	25V	
C204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C205	1-124-477-11	ELECT	47MF	20%	16V	
C206	1-124-477-11	ELECT	47MF	20%	16V	
C208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C209	1-126-233-11	ELECT	22MF	20%	50V	
C210	1-136-165-00	FILM	0.1MF	5%	50V	
C211	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C212	1-136-165-00	FILM	0.1MF	5%	50V	
C213	1-124-903-11	ELECT	1MF	20%	50V	
C214	1-102-121-00	CERAMIC	0.0022MF	10%	50V	
C215	1-130-491-00	MYLAR	0.047MF	5%	50V	
C216	1-136-165-00	FILM	0.1MF	5%	50V	
C217	1-102-114-00	CERAMIC	470PF	10%	50V	
C218	1-102-114-00	CERAMIC	470PF	10%	50V	
C219	1-102-114-00	CERAMIC	470PF	10%	50V	
C220	1-124-119-00	ELECT	330MF	20%	16V	
C221	1-124-477-11	ELECT	47MF	20%	16V	
C222	1-124-903-11	ELECT	1MF	20%	50V	
C223	1-126-233-11	ELECT	22MF	20%	50V	
C224	1-124-477-11	ELECT	47MF	20%	16V	
C225	1-126-101-11	ELECT	100MF	20%	16V	
C226	1-124-925-11	ELECT	2.2MF	20%	50V	
C228	1-124-479-11	ELECT	330MF	20%	25V	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R255	1-216-226-00	METAL GLAZE 15K 5%	1/8W
R256	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R257	1-216-033-00	METAL GLAZE 220 5%	1/10W
R258	1-216-033-00	METAL GLAZE 220 5%	1/10W
R601 ⚠	1-205-909-11	WIREWOUND 3.3 5%	10W
R623	1-249-443-11	CARBON 0.47 5%	1/4W F
R691 ⚠	1-244-945-51	CARBON 1M 5%	1/2W

< RELAY >

REF.NO.	PART NO.	DESCRIPTION	REMARK
RY601	1-515-516-00	RELAY	

< TRANSFORMER >

REF.NO.	PART NO.	DESCRIPTION	REMARK
T601 ⚠	1-424-391-11	TRANSFORMER, LINE FILTER	
T602 ⚠	1-424-391-11	TRANSFORMER, LINE FILTER	
T607	1-424-391-11	TRANSFORMER, LINE FILTER	

< THERMISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
THP601 ⚠	1-806-165-12	THERMISTOR (POSITIVE)	

****

9-902-396-01 PW BOARD
****

< SWITCH >

9-902-398-01 SWITCH TACTILE

****

MISCELLANEOUS
****

REF.NO.	PART NO.	DESCRIPTION	REMARK
⚠	1-426-590-11	COIL, DEMAGNETIZATION	
⚠	1-451-354-11	DEFLECTION YOKE (Y11SLA)	
	1-452-094-00	MAGNET.ROTATABLE DISK:15mm	
	1-452-512-11	MAGNET	
	1-466-678-11	SWITCH BLOCK	
J501 ⚠	1-540-054-11	INLET.AC	
	1-561-530-00	CONNECTOR (DC POWER)	
S501 ⚠	1-572-960-11	SWITCH SEESAW (AC POWER)	
SP901	1-544-187-11	SPEAKER	
V901 ⚠	8-735-821-05	PICTURE TUBE (A27KGC10X)	

****

ACCESSORIES AND PACKING MATERIALS
****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-501-397-41	ANTENNA, TELESCOPIC (AN-18G)	
⚠	1-532-325-11	FUSE, TIME-LAG 6.3A/250V	
⚠	1-690-827-11	CORD SET POWER (AEP/ET)	
⚠	1-590-865-11	CORD, POWER (UK)	
	1-690-828-11	CORD DC POWER	
	*3-704-301-01	BAG (STANDARD), PROTECTION	
	4-202-233-61	MANUAL, INSTRUCTION (ENGLISH)	
	4-202-233-11	MANUAL, INSTRUCTION (GERMAN/FRENCH/ENGLISH/ITALIAN)	
	4-202-233-41	MANUAL, INSTRUCTION (ITALIAN)	
	*4-035-665-01	CUSHION (UPPER) (ASSY)	
	*4-035-666-01	CUSHION (LOWER) (ASSY)	
	*4-035-667-01	TRAY	
	*4-035-668-01	INDIVIDUAL CARTON	

REMOTE COMMANDER

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-467-049-11	REMOTE COMMANDER (RM-828)	
	*4-035-049-11	COVER, BATTERY (FOR RM-828)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
C229	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C230	1-126-103-11	ELECT 470MF 20%	16V
C234	1-124-477-11	ELECT 47MF 20%	16V
C235	1-124-477-11	ELECT 47MF 20%	16V
C601 ⚠	1-136-517-11	FILM 0.22MF 20%	300V
C605 ⚠	1-161-246-61	CERAMIC 0.0022MF 20%	400V
C606 ⚠	1-136-517-11	FILM 0.22MF 20%	300V
C607 ⚠	1-161-964-61	CERAMIC 0.0047MF	250V
C608 ⚠	1-161-964-61	CERAMIC 0.0047MF	250V
C609	1-162-599-12	CERAMIC 0.0047MF 20%	400V
C610	1-125-318-00	ELECT (BLOCK) 220MF 20%	400V
C611 ⚠	1-161-964-61	CERAMIC 0.0047MF	250V
C652 ⚠	1-164-246-61	CERAMIC 0.0022MF 20%	400V

< CONNECTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
CN10	1-561-534-00	SOCKET, PIN 21P	
CN201	*1-564-515-11	PLUG, CONNECTOR 12P	
CN202	*1-564-512-11	PLUG, CONNECTOR 9P	
CN203	*1-568-882-51	PIN, CONNECTOR 7P	
CN204	*1-564-513-11	PLUG, CONNECTOR 10P	
CN205	*1-568-877-51	PIN, CONNECTOR 2P	
CN206	*1-568-878-51	PIN, CONNECTOR 3P	
CN601 ⚠	*1-580-843-11	PIN, CONNECTOR (POWER)	
CN602 ⚠	*1-508-786-11	PIN, CONNECTOR (5MM PITCH) 2P	
CN603	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	

< DIODE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
D201	8-719-110-31	DIODE RD12ESB2	
D202	8-719-110-31	DIODE RD12ESB2	
D203	8-719-921-69	DIODE MTZJ-9.1	
D205	8-719-109-85	DIODE RD5.1ESB2	
D206	8-719-110-31	DIODE RD12ESB2	
D207	8-719-110-31	DIODE RD12ESB2	
D208	8-719-110-31	DIODE RD12ESB2	
D209	8-719-110-31	DIODE RD12ESB2	
D210	8-719-110-31	DIODE RD12ESB2	
D211	8-719-110-31	DIODE RD12ESB2	
D212	8-719-110-31	DIODE RD12ESB2	
D213	8-719-110-31	DIODE RD12ESB2	
D214	8-719-911-19	DIODE 1SS119	
D215	8-719-110-31	DIODE RD12ESB2	
D216	8-719-400-18	DIODE DAN202K-T-147	
D217	8-719-914-44	DIODE DAP202K-T-147	
D601	8-719-311-72	DIODE RBV-406H-01	

< FUSE >

REF.NO.	PART NO.	DESCRIPTION	REMARK
F601 ⚠	1-576-231-21	FUSE (H.B.C.) 4A 250V	
	1-533-230-11	HOLDER, FUSE (F601)	

< IC >

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC201	8-752-032-27	IC CXA1114P	
IC202	8-759-041-82	IC TDA1013B	

< COIL >

REF.NO.	PART NO.	DESCRIPTION	REMARK
L201	1-412-545-11	INDUCTOR 470UH	

< TRANSISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q203	8-729-216-22	TRANSISTOR 2SA1162-G	

The components identified by shading and marked ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q204	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-119-78	TRANSISTOR JC501-Q-AMMO	
Q207	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q208	8-729-920-74	TRANSISTOR 2SC2412K-QR	

< RESISTOR >

REF.NO.	PART NO.	DESCRIPTION	REMARK
JR200	1-216-296-00	METAL GLAZE 0 5%	1/8W
JR201	1-216-295-00	METAL GLAZE 0 5%	1/10W
JR202	1-216-295-00	METAL GLAZE 0 5%	1/10W
JR203	1-216-295-00	METAL GLAZE 0 5%	1/10W
JR204	1-216-296-00	METAL GLAZE 0 5%	1/8W
JR205	1-216-296-00	METAL GLAZE 0 5%	1/8W
R201	1-216-295-00	METAL GLAZE 0 5%	1/10W
R202	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R204	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R206	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
R207	1-247-738-11	CARBON 82 5%	1/2W F
R208	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R209	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R210	1-216-105-00	METAL GLAZE 220K 5%	1/10W
R211	1-216-295-00	METAL GLAZE 0 5%	1/10W
R212	1-249-387-11	CARBON 3.3 5%	1/4W
R213	1-249-426-11	CARBON 5.6K 5%	1/4W
R214	1-249-438-11	CARBON 56K 5%	1/4W
R215	1-249-404-00	CARBON 82 5%	1/4W
R216	1-249-404-00	CARBON 82 5%	1/4W
R218	1-249-404-00	CARBON 82 5%	1/4W
R219	1-249-404-00	CARBON 82 5%	1/4W
R220	1-249-403-11	CARBON 68 5%	1/4W
R221	1-216-033-00	METAL GLAZE 220 5%	1/10W
R222	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
R223	1-216-041-00	METAL GLAZE 470 5%	1/10W
R224	1-216-033-00	METAL GLAZE 220 5%	1/10W
R225	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R227	1-216-047-00	METAL GLAZE 820 5%	1/10W
R228	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R229	1-216-295-00	METAL GLAZE 0 5%	1/10W
R230	1-216-021-00	METAL GLAZE 68 5%	1/10W
R231	1-216-295-00	METAL GLAZE 0 5%	1/10W
R232	1-216-033-00	METAL GLAZE 220 5%	1/10W
R233	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R234	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R235	1-216-021-00	METAL GLAZE 68 5%	1/10W
R236	1-249-426-11	CARBON 5.6K 5%	1/4W
R237	1-249-417-11	CARBON 1K 5%	1/4W
R238	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
R239	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R240	1-216-033-00	METAL GLAZE 220 5%	1/10W
R241	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R242	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R244	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R245	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R246	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R247	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R251	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R252	1-249-405-11	CARBON 100 5%	1/4W
R253	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
R254	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W